~~09569[illegible]~~

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*** YOU HAVE NEW MAIL ***

=> s mass spectrometry
L1 278371 MASS SPECTROMETRY

=> s l1 and protein
L2 43588 L1 AND PROTEIN

=> s l2 and quaternary amine
L3 151 L2 AND QUATERNARY AMINE

=> s l3 and 250
L4 127 L3 AND 250

=> s l3 and functional group
L5 50 L3 AND FUNCTIONAL GROUP

=> s l5 and cleav?
L6 39 L5 AND CLEAV?

=> dup rem l6
PROCESSING COMPLETED FOR L6
L7 39 DUP REM L6 (0 DUPLICATES REMOVED)

=> s l7 and ionized charge
L8 5 L7 AND IONIZED CHARGE

=> d l8 bib abs 1-5

L8 ANSWER 1 OF 5 USPATFULL on STN
AN 2003:234664 USPATFULL
TI Methods and compositions for analyzing nucleic acid molecules utilizing sizing techniques
IN Ness, Jeffrey Van, Seattle, WA, United States
Tabone, John C., Bothell, WA, United States
Howbert, J. Jeffry, Bellevue, WA, United States
Mulligan, John T., Seattle, WA, United States
PA Qiagen Genomics, Inc., Bothell, WA, United States (U.S. corporation)

09567863

PI US 6613508 B1 20030902
AI US 1997-898564 19970722 (8)
RLI Continuation-in-part of Ser. No. US 1997-786834, filed on 22 Jan 1997, now abandoned
PRAI US 1996-14536P 19960123 (60)
US 1996-20487P 19960604 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Houtteman, Scott W.
LREP SEED Intellectual Property Law Group PLLC
CLMN Number of Claims: 40
ECL Exemplary Claim: 1
DRWN 48 Drawing Figure(s); 44 Drawing Page(s)
LN.CNT 6942
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Tags and linkers specifically designed for a wide variety of nucleic acid reactions are disclosed, which are suitable for a wide variety of nucleic acid reactions wherein separation of nucleic acid molecules based upon size is required.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 5 USPATFULL on STN
AN 2003:112863 USPATFULL
TI Methods and compositions for enhancing sensitivity in the analysis of biological-based assays
IN Van Ness, Jeffrey, Seattle, WA, UNITED STATES
Tabone, John C., Bothell, CA, UNITED STATES
Howbert, J. Jeffry, Bellevue, WA, UNITED STATES
Mulligan, John T., Seattle, WA, UNITED STATES
PA QIAGEN Genomics, Inc., Bothell, WA (U.S. corporation)
PI US 2003077595 A1 20030424
AI US 2001-467 A1 20011024 (10)
RLI Continuation of Ser. No. US 1999-457048, filed on 7 Dec 1999, ABANDONED
Continuation of Ser. No. US 1997-898501, filed on 22 Jul 1997, GRANTED, Pat. No. US 6027890 Continuation-in-part of Ser. No. US 1997-787521, filed on 22 Jan 1997, ABANDONED
PRAI US 1996-10436P 19960123 (60)
US 1996-15402P 19960321 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 61
ECL Exemplary Claim: 1
DRWN 36 Drawing Page(s)
LN.CNT 5954
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for detecting the binding of a first member to a second member of a ligand pair, comprising the steps of (a) combining a set of first tagged members with a biological sample which may contain one or more second members, under conditions, and for a time sufficient to permit binding of a first member to a second member, wherein said tag is correlative with a particular first member and detectable by non-fluorescent spectrometry, or potentiometry, (b) separating bound first and second members from unbound members, (c) **cleaving** the tag from the tagged first member, and (d) detecting the tag by non-fluorescent spectrometry, or potentiometry, and therefrom detecting the binding of the first member to the second member .

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

09567863

L8 ANSWER 3 OF 5 USPATFULL on STN
AN 2002:221317 USPATFULL
TI Methods and compositions for determining the sequence of nucleic acid molecules
IN Ness, Jeffrey Van, Seattle, WA, UNITED STATES
Tabone, John C., Bothell, WA, UNITED STATES
Howbert, J. Jeffry, Bellevue, WA, UNITED STATES
Mulligan, John T., Seattle, WA, UNITED STATES
PI US 2002119456 A1 20020829
AI US 2001-855999 A1 20010514 (9)
RLI Continuation of Ser. No. US 1997-898180, filed on 22 Jul 1997, PATENTED
Continuation-in-part of Ser. No. US 1997-786835, filed on 22 Jan 1997, ABANDONED
PRAI US 1996-10462P 19960123 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 58
ECL Exemplary Claim: 1
DRWN 25 Drawing Page(s)
LN.CNT 6401
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and compounds, including compositions therefrom, are provided for determining the sequence of nucleic acid molecules. The methods permit the determination of multiple nucleic acid sequences simultaneously. The compounds are used as tags to generate tagged nucleic acid fragments which are complementary to a selected target nucleic acid molecule. Each tag is correlative with a particular nucleotide and, in a preferred embodiment, is detectable by **mass spectrometry**. Following separation of the tagged fragments by sequential length, the tags are **cleaved** from the tagged fragments. In a preferred embodiment, the tags are detected by **mass spectrometry** and the sequence of the nucleic acid molecule is determined therefrom. The individual steps of the methods can be used in automated format, e.g., by the incorporation into systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 4 OF 5 USPATFULL on STN
AN 2001:196797 USPATFULL
TI Methods and compositions for determining the sequence of nucleic acid molecules
IN Van Ness, Jeffrey, Seattle, WA, United States
Tabone, John C., Bothell, WA, United States
Howbert, J. Jeffry, Bellevue, WA, United States
Mulligan, John T., Seattle, WA, United States
PA Qiagen Genomics, Inc., Bothell, WA, United States (U.S. corporation)
PI US 6312893 B1 20011106
AI US 1997-898180 19970722 (8)
RLI Continuation-in-part of Ser. No. US 1997-786835, filed on 22 Jan 1997, now abandoned
PRAI US 1996-10462P 19960123 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Houtteman, Scott W.
LREP Seed Intellectual Property Law Group PLLC
CLMN Number of Claims: 58
ECL Exemplary Claim: 1
DRWN 46 Drawing Figure(s); 42 Drawing Page(s)
LN.CNT 6431

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compounds, including compositions therefrom, are provided for determining the sequence of nucleic acid molecules. The methods permit the determination of multiple nucleic acid sequences simultaneously. The compounds are used as tags to generate tagged nucleic acid fragments which are complementary to a selected target nucleic acid molecule. Each tag is correlative with a particular nucleotide and, in a preferred embodiment, is detectable by **mass spectrometry**. Following separation of the tagged fragments by sequential length, the tags are **cleaved** from the tagged fragments. In a preferred embodiment, the tags are detected by **mass spectrometry** and the sequence of the nucleic acid molecule is determined therefrom. The individual steps of the methods can be used in automated format, e.g., by the incorporation into systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 5 OF 5 USPATFULL on STN
AN 2000:21384 USPATFULL
TI Methods and compositions for enhancing sensitivity in the analysis of biological-based assays
IN Ness, Jeffrey Van, Seattle, WA, United States
Tabone, John C., Bothell, WA, United States
Howbert, J. Jeffry, Bellevue, WA, United States
Mulligan, John T., Seattle, WA, United States
PA Rapigene, Inc., Bothell, WA, United States (U.S. corporation)
PI US 6027890 20000222
AI US 1997-898501 19970722 (8)
RLI Continuation-in-part of Ser. No. US 1997-787521, filed on 22 Jan 1997, now abandoned
PRAI US 1996-10436P 19960123 (60)
US 1996-15402P 19960321 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Houtteman, Scott W.
LREP Seed and Berry LLP
CLMN Number of Claims: 72
ECL Exemplary Claim: 1
DRWN 19 Drawing Figure(s); 19 Drawing Page(s)
LN.CNT 6333
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for detecting the binding of a first member to a second member of a ligand pair, comprising the steps of (a) combining a set of first tagged members with a biological sample which may contain one or more second members, under conditions, and for a time sufficient to permit binding of a first member to a second member, wherein said tag is correlative with a particular first member and detectable by non-fluorescent spectrometry, or potentiometry, (b) separating bound first and second members from unbound members, (c) **cleaving** the tag from the tagged first member, and (d) detecting the tag by non-fluorescent spectrometry, or potentiometry, and therefrom detecting the binding of the first member to the second member.

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=> d l21 bib abs 1-8

L21 ANSWER 1 OF 8 USPATFULL on STN
AN 2003:173225 USPATFULL
TI Labeling of **protein** samples
IN Schneider, Luke V., Half Moon Bay, CA, UNITED STATES
Hall, Michael P., San Carlos, CA, UNITED STATES
Petesch, Robert M., Newark, CA, UNITED STATES
Peterson, Jeffrey N., Foster City, CA, UNITED STATES
PA Target Discovery, Inc., San Carlos, CA (U.S. corporation)
PI US 2003119069 A1 20030626
AI US 2002-298268 A1 20021115 (10)
RLI Continuation of Ser. No. US 2000-551937, filed on 19 Apr 2000, ABANDONED
PRAI US 1999-130238P 19990420 (60)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 1506
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are methods of labeling multiple **proteins** in **protein** mixtures to prepare the samples for identification and analysis, and useful in developing a proteomics database.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 2 OF 8 USPATFULL on STN
AN 2003:112884 USPATFULL
TI Biomolecule characterization using **mass spectrometry** and affinity tags
IN Lomas, Lee O., Foster City, CA, UNITED STATES
PA Ciphergen Biosystems, Inc., Fremont, CA, UNITED STATES (U.S. corporation)
PI US 2003077616 A1 20030424
AI US 2002-125819 A1 20020418 (10)
PRAI WO 2001-US212418 20010419
US 2001-285630P 20010419 (60)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 74
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 2977
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to methods for comparing the relative amounts of biomolecules and identifying biomolecules in samples using affinity tags and **mass spectrometry**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 3 OF 8 USPATFULL on STN
AN 2003:78447 USPATFULL
TI Method for correlating gene expression profiles with **protein** expression profiles
IN Rich, William E., Redwood Shores, CA, UNITED STATES
Hutchens, T. William, Mountain View, CA, UNITED STATES

09567863

PA Ciphergen Biosystems, Inc., Fremont, CA, UNITED STATES (U.S. corporation)
PI US 2003054367 A1 20030320
AI US 2002-76967 A1 20020215 (10)
PRAI US 2001-269772P 20010216 (60)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2409
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods for correlating gene and **protein** expression in a cell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 4 OF 8 USPATFULL on STN
AN 2003:23643 USPATFULL
TI Modulation of molecular interaction sites on RNA and other biomolecules
IN Ecker, David J., Encinitas, CA, UNITED STATES
Griffey, Richard, Vista, CA, UNITED STATES
Crooke, Stanley T., Carlsbad, CA, UNITED STATES
Sampath, Ranga, San Diego, CA, UNITED STATES
Swayze, Eric, Carlsbad, CA, UNITED STATES
Mohan, Venkatraman, Carlsbad, CA, UNITED STATES
Hofstadler, Steven, Oceanside, CA, UNITED STATES
PI US 2003017483 A1 20030123
AI US 2002-104949 A1 20020322 (10)
RLI Continuation of Ser. No. US 1998-76404, filed on 12 May 1998, PENDING
DT Utility
FS APPLICATION
LREP WOODCOCK WASHBURN LLP, ONE LIBERTY PLACE, 46TH FLOOR, 1650 MARKET STREET, PHILADELPHIA, PA, 19103
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 59 Drawing Page(s)
LN.CNT 6823
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for the identification of compounds which modulate, either inhibit or stimulate, biomolecules are provided. Nucleic acids, especially RNAs are preferred substrates for such modulation. The present methods are particularly powerful in that they provide novel combinations of techniques which give rise to compounds, usually "small" organic compounds, which are highly potent modulators of RNA and other biomolecular activity. In accordance with preferred aspects of the invention, very large numbers of compounds may be tested essentially simultaneously to determine whether they are likely to interact with a molecular interaction site and modulate the activity of the biomolecule. Pharmaceuticals, veterinary **drugs**, agricultural chemicals, industrial chemicals, research chemicals and many other beneficial compounds may be identified in accordance with embodiments of this invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 5 OF 8 USPATFULL on STN
AN 2002:307838 USPATFULL
TI Mass defect labeling for the determination of oligomer sequences
IN Schneider, Luke V., Half Moon Bay, CA, UNITED STATES

09567863

Hall, Michael P., San Carlos, CA, UNITED STATES
Petesch, Robert, Newark, CA, UNITED STATES
PA Target Discovery, San Carlos, CA, UNITED STATES, 94070 (U.S. corporation)
PI US 2002172961 A1 20021121
AI US 2001-35349 A1 20011019 (10)
PRAI US 2000-242165P 20001019 (60)
US 2000-242398P 20001019 (60)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 50
ECL Exemplary Claim: 1
DRWN 32 Drawing Page(s)
LN.CNT 3568
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Mass tagging methods are provided that lead to mass spectrometer detection sensitivities and molecular discriminations that are improved over other methods. In particular the methods are useful for discriminating tagged molecules and fragments of molecules from chemical noise in the mass spectrum. These mass tagging methods are useful for oligomer sequencing, determining the relative abundances of molecules from different samples, and identifying individual molecules or chemical processing steps in combinatorial chemical libraries. The methods provided are useful for the simultaneous analysis of multiple molecules and reaction mixtures by mass spectrometric methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 6 OF 8 USPATFULL on STN
AN 2002:243171 USPATFULL
TI Methods for sequencing **proteins**
IN Schneider, Luke V., Half Moon Bay, CA, UNITED STATES
Hall, Michael P., San Carlos, CA, UNITED STATES
Peterson, Jeffrey N., Foster City, CA, UNITED STATES
PA Target Discovery, San Carlos, CA (U.S. corporation)
PI US 2002132357 A1 20020919
AI US 2002-68359 A1 20020206 (10)
RLI Division of Ser. No. US 2000-513395, filed on 25 Feb 2000, GRANTED, Pat. No. US 6379971
PRAI US 1999-130238P 19990420 (60)
US 1998-75715P 19980224 (60)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 1724
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for **protein** sequencing using **mass spectrometry**. Also provided are **protein** labeling agents and labeled **proteins** for use in conjunction with the present method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 7 OF 8 USPATFULL on STN
AN 2002:95611 USPATFULL
TI Methods for sequencing **proteins**

09567863

IN Schneider, Luke V., Half Moon Bay, CA, United States
Hall, Michael P., San Carlos, CA, United States
Peterson, Jeffrey N., Foster City, CA, United States
PA Target Discovery, Inc., San Carlos, CA, United States (U.S. corporation)
PI US 6379971 B1 20020430
AI US 2000-513395 20000225 (9)
PRAI US 1999-130238P 19990420 (60)
US 1998-75715P 19980224 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Warden, Jill; Assistant Examiner: Cole, Monique T.
LREP Townsend and Townsend and Crew LLP
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 11 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 1664
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for **protein** sequencing using **mass spectrometry**. Also provided are **protein** labeling agents and labeled **proteins** for use in conjunction with the present method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 8 OF 8 USPATFULL on STN
AN 2001:18590 USPATFULL
TI Synthesis of **proteins** by native chemical ligation
IN Kent, Stephen B. H., San Francisco, CA, United States
Muir, Tom W., New York, NY, United States
Dawson, Philip E., Solana Beach, CA, United States
PA The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)
PI US 6184344 B1 20010206
WO 9634878 19961107
AI US 1998-945997 19980212 (8)
WO 1995-US5668 19950504
19980212 PCT 371 date
19980212 PCT 102(e) date
DT Utility
FS Granted
EXNAM Primary Examiner: Russel, Jeffrey E
LREP Lewis, Donald G.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 975
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **Proteins** of moderate size having native **peptide** backbones are produced by a method of native chemical ligation. Native chemical ligation employs a chemoselective reaction of two unprotected **peptide** segments to produce a transient thioester-linked intermediate. The transient thioester-linked intermediate then spontaneously undergoes a rearrangement to provide the full length ligation product having a native **peptide** bond at the ligation site. Full length ligation products are chemically identical to **proteins** produced by cell free synthesis. Full length ligation products may be refolded and/or oxidized, as allowed, to form native disulfide-containing **protein** molecules. The technique of native chemical ligation is employable for chemically synthesizing full length **proteins**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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```
=> s l1 and (protein? or peptide or oligosaccharide or antibody or drugs) (5a)
link? (8a) (functional)
L22         431 L1 AND (PROTEIN? OR PEPTIDE OR OLIGOSACCHARIDE OR ANTIBODY OR
                DRUGS) (5A) LINK? (8A) (FUNCTIONAL)

=> s l22 and (quaternary amine or tertiary amine or acid?)
L23         419 L22 AND (QUATERNARY AMINE OR TERTIARY AMINE OR ACID?)

=> s l23 and 250
L24         345 L23 AND 250

=> s l24 and cleav?
L25         311 L24 AND CLEAV?

=> s l1 and (protein? or peptide or oligosaccharide or antibody or drugs) (5a)
link? (8a) (cleav?
UNMATCHED LEFT PARENTHESIS '8A) (CLEAV?'
The number of right parentheses in a query must be equal to the
number of left parentheses.

=> s l1 and (protein? or peptide or oligosaccharide or antibody or drugs) (5a)
link? (8a) (cleav?)
L26        1180 L1 AND (PROTEIN? OR PEPTIDE OR OLIGOSACCHARIDE OR ANTIBODY OR
                DRUGS) (5A) LINK? (8A) (CLEAV?)

=> s l26 and functional group?
L27         289 L26 AND FUNCTIONAL GROUP?

=> s l27 and ((quaternary amine or tertiary amine or acid?)
UNMATCHED LEFT PARENTHESIS 'AND ((QUATERNAR'
The number of right parentheses in a query must be equal to the
number of left parentheses.

=> s l27 and (quaternary amine or tertiary amine or acid?)
L28         289 L27 AND (QUATERNARY AMINE OR TERTIARY AMINE OR ACID?)

=> s l28 and ionized charge
L29           0 L28 AND IONIZED CHARGE

=> s l18 and charge
L30         100 L18 AND CHARGE

=> s l30 and not nucleic acid
MISSING TERM 'AND NOT'
The search profile that was entered contains a logical
operator followed immediately by another operator.

=> s l30 and (protein? or peptide or oligosaccharide or antibody or drugs) not
nucleic acid?
   3 FILES SEARCHED...
L31           8 L30 AND (PROTEIN? OR PEPTIDE OR OLIGOSACCHARIDE OR ANTIBODY OR
                DRUGS) NOT NUCLEIC ACID?

=> dup rem l31
PROCESSING COMPLETED FOR L31
L32           8 DUP REM L31 (0 DUPLICATES REMOVED)

=> d l32 bib abs 1-8

L32  ANSWER 1 OF 8  USPATFULL on STN
AN     2003:165941  USPATFULL
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09567863

TI Method for generating, screening and dereplicating natural product libraries for the discovery of therapeutic agents
IN Jia, Qi, Superior, CO, UNITED STATES
Hong, Mei-Feng, Northglenn, CO, UNITED STATES
PA UNIGEN PHARMACEUTICALS, INC., Broomfield, CO (U.S. corporation)
PI US 2003113797 A1 20030619
AI US 2002-185758 A1 20020627 (10)
PRAI US 2001-301523P 20010627 (60)
DT Utility
FS APPLICATION
LREP SWANSON & BRATSCHUN L.L.C., 1745 SHEA CENTER DRIVE, SUITE 330, HIGHLANDS RANCH, CO, 80129
CLMN Number of Claims: 71
ECL Exemplary Claim: 1
DRWN 42 Drawing Page(s)
LN.CNT 2449
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to a technology platform, referred to as Phytologix.TM. for the discovery of novel bioactive pharmaceutical, nutraceutical and cosmetic agents. Specifically, this invention includes an integrated system for the collection of medicinal plants and creation of informatic databases related to these plants. This invention also relates to an improved standardized extraction and fractionation process, which provides significant advantages over the prior art in the terms of simplicity, efficiency of the separations, the quality of the library, low cost of the process and extraordinary throughput. This invention provides details to the structure dereplication process by utilizing the technology such as HPLC/PDA/MS coupled with high throughput bioassay data and an internal pure compound library. It has been proven to be much more efficient and accurate when compared to the prior art methods. Finally, the Phytologix.TM. platform has been approved as a realistic and efficient process by the demonstration of the whole process of discovery and development of natural COX-2 and tyrosinase inhibitors as novel nutraceutical and cosmetic products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L32 ANSWER 2 OF 8 USPATFULL on STN
AN 2003:93845 USPATFULL
TI Derivatization and solubilization of insoluble classes of fullerenes
IN Bolskar, Robert D., Boulder, CO, UNITED STATES
Alford, J. Michael, Lakewood, CO, UNITED STATES
PI US 2003065206 A1 20030403
AI US 2002-263375 A1 20021001 (10)
PRAI US 2002-371380P 20020409 (60)
US 2001-326353P 20011001 (60)
DT Utility
FS APPLICATION
LREP GREENLEE WINNER AND SULLIVAN P C, 5370 MANHATTAN CIRCLE, SUITE 201, BOULDER, CO, 80303
CLMN Number of Claims: 55
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 2336
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides improved methods for the derivatization and solubilization of fullerenes, which are particularly useful for those fullerenes that are normally insoluble and which are specifically applied, among others, to endohedral fullerenes, including endohedral metallofullerenes; empty fullerenes, including small-bandgap fullerenes and other insoluble fullerenes and to very high molecular weight

fullerenic materials generated in fullerenic soot, including giant fullerenes, fullerenic polymers, carbon nanotubes and metal-carbon nanoencapsulates. More specifically the invention relates to improved methods for cyclopropanation of fullerenes. Specific reaction conditions are provided which allow for cyclopropanation reactions to be successfully performed for the first time on insoluble classes of fullerenes. Also provided is a method for purification of one or more fullerenes from a fullerenic material containing the one or more fullerenes in addition to non-fullerenic carbonaceous material, particularly amorphous carbonaceous material, by derivatizing one or more fullerenes using the methods of the invention and separating soluble derivatizes fullerenes from insoluble materials.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L32 ANSWER 3 OF 8 USPATFULL on STN
AN 2002:164715 USPATFULL
TI Novel compound and methods of diagnosis using the compound
IN Gahunia, Harpal Kaur, Warsaw, IN, UNITED STATES
Pritzker, Kenneth, Toronto, CANADA
Vieth, Reinhold, Toronto, CANADA
PI US 2002086333 A1 20020704
AI US 2001-966840 A1 20010928 (9)
RLI Continuation of Ser. No. WO 2000-CA750, filed on 22 Jun 2000, UNKNOWN
PRAI US 1999-140350P 19990622 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 2047
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel cartilage-specific compound and methods of diagnosis in medical and veterinary contexts using the compound. Screening methods for therapeutic substances and methods of treatment are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L32 ANSWER 4 OF 8 USPATFULL on STN
AN 2002:133453 USPATFULL
TI Bioelastomer nanomachines and biosensors
IN Urry, Dan W., Birmingham, AL, UNITED STATES
PI US 2002068304 A1 20020606
AI US 2001-888260 A1 20010621 (9)
PRAI US 2000-213364P 20000623 (60)
DT Utility
FS APPLICATION
LREP COOLEY GODWARD, LLP, 3000 EL CAMINO REAL, 5 PALO ALTO SQUARE, PALO ALTO, CA, 94306
CLMN Number of Claims: 56
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 2422
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Bioelastomers, having repeating **peptide** monomeric units selected from the group consisting of bioelastic nonapeptides, pentapeptides and tetrapeptides, are used to produce nanomachines and biosensors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L32 ANSWER 5 OF 8 USPATFULL on STN
AN 2002:67186 USPATFULL
TI NO-MODIFIED HEMOGLOBINS AND USES THEREFOR
IN STAMLER, JONATHAN S., CHAPEL HILL, NC, UNITED STATES
GOW, ANDREW J., DURHAM, NC, UNITED STATES
PI US 2002037839 A1 20020328
AI US 1999-369966 A1 19990806 (9)
DT Utility
FS APPLICATION
LREP DAVID E BROOK ESQ, HAMILTON BROOK SMITH & REYNOLDS P C, TWO MILITIA DRIVE, LEXTINGTON, MA, 024214799
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 37 Drawing Page(s)
LN.CNT 3435
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB S-nitrosohemoglobin (SNO-Hb) can be formed by reaction of Hb with S-nitrosothiol and by other methods described herein which do not result in oxidation of the heme Fe. Other methods can be used which are not specific only for thiol groups, but which nitrosate Hb more extensively, and may produce polynitrosated metHb as a product or intermediate product of the method. SNO-Hb in its various forms and combinations thereof (oxy, deoxy, met; specifically S-nitrosylated, or nitrosated or nitrated to various extents) can be administered to an animal or human where it is desired to oxygenate, to scavenge free radicals, or to release NO.sup.+ groups to tissues. Thiols and/or NO donating agents can also be administered to enhance the transfer of NO.sup.+ groups. Examples of conditions to be treated by SNO-Hbs or other nitrosated or nitrated forms of Hb include ischemic injury, hypertension, angina, reperfusion injury and inflammation, and disorders characterized by thrombosis. Further embodiments of the invention are methods for assessing oxygen delivery to the tissues of a mammal by measuring SNO-Hb and nitrosylhemoglobin in blood.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L32 ANSWER 6 OF 8 USPATFULL on STN
AN 2001:237697 USPATFULL
TI METHOD TO IDENTIFY A SURFACE-BOUND MOLECULE
IN WINOGRAD, NICHOLAS, SPRING MILLS, PA, United States
RIEDERER, DONALD E., COLUMBIA, MO, United States
CHATTERJEE, REEMA, ST. PAUL, MN, United States
PI US 2001055813 A1 20011227
US 6432716 B2 20020813
AI US 1998-51216 A1 19981218 (9)
WO 1996-US15991 19961003
None PCT 102(e) date
DT Utility
FS APPLICATION
LREP Stanley A. Kim, Ph.D., Equire, Akerman, Senterfitt, & Eidson, P.A., 222 Lakeview Avenue, 4th Floor, P.O. Box 3188, West Palm Beach, FL, 33402-3188
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 763
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a method of identifying a molecule of a molecule-substrate complex, wherein the molecule is covalently attached directly to a substrate or indirectly by means of a linking moiety, comprising: (a) bombarding the molecule-substrate complex with energized particles to cleave the molecule from the molecule-substrate

complex; and (b) determining the molecular weight of the **cleaved** molecule by means of **mass spectrometry**. The inventive method may further comprise irradiating the **cleaved** molecule with photons.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L32 ANSWER 7 OF 8 USPATFULL on STN
AN 2001:190719 USPATFULL
TI Amphiphilic drug-oligomer conjugates with hydroyzable lipophile components and methods for making and using the same
IN Ekwuribe, Nnochiri, Cary, NC, United States
Ramaswamy, Muthukumar, Cary, NC, United States
Rajagopalan, Jayanthi Sethuraman, Cary, NC, United States
PA Nobex Corporation, Research Triangle Park, NC, United States (U.S. corporation)
PI US 6309633 B1 20011030
AI US 1999-336548 19990619 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Russel, Jeffrey E.
LREP Myers Bigel Sibley & Sajovec, P.A.
CLMN Number of Claims: 60
ECL Exemplary Claim: 49
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 2044
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a drug-oligomer conjugate having the following general formula: ##STR1##

wherein D is a therapeutic drug moiety; H and H' are each a hydrophilic moiety, independently selected from the group consisting of straight or branched PEG polymers having from 2 to 130 PEG subunits, and sugars; L is a lipophilic moiety selected from the group consisting of alkyl groups having 2-26 carbon atoms, cholesterol, adamantane and fatty acids; o is a number from 1 to the maximum number of covalent bonding sites on H; m+n+p together have a value of at least one and not exceeding the total number of covalent bonding sites on D for the --H', --L and --H--L substituents; the H--L bond(s) are hydrolyzable and the D--L' bond(s), when present, are hydrolyzable; the conjugate being further characterized by one of the following: (i) m is 0 and p is at least 1; (ii) n is 0 and p is at least 1; (iii) m and n are each 0 and p is at least 1; (iv) p is 0 and m and n are each at least 1. The therapeutic drug moiety is preferably a therapeutic **protein** or **peptide**, preferably insulin or a functional equivalent thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L32 ANSWER 8 OF 8 USPATFULL on STN
AN 2001:18590 USPATFULL
TI Synthesis of **proteins** by native chemical ligation
IN Kent, Stephen B. H., San Francisco, CA, United States
Muir, Tom W., New York, NY, United States
Dawson, Philip E., Solana Beach, CA, United States
PA The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)
PI US 6184344 B1 20010206
WO 9634878 19961107
AI US 1998-945997 19980212 (8)
WO 1995-US5668 19950504
19980212 PCT 371 date
19980212 PCT 102(e) date

09567863

DT Utility
FS Granted
EXNAM Primary Examiner: Russel, Jeffrey E
LREP Lewis, Donald G.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 975
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **Proteins** of moderate size having native **peptide** backbones are produced by a method of native chemical ligation. Native chemical ligation employs a chemoselective reaction of two unprotected **peptide** segments to produce a transient thioester-linked intermediate. The transient thioester-linked intermediate then spontaneously undergoes a rearrangement to provide the full length ligation product having a native **peptide** bond at the ligation site. Full length ligation products are chemically identical to **proteins** produced by cell free synthesis. Full length ligation products may be refolded and/or oxidized, as allowed, to form native disulfide-containing **protein** molecules. The technique of native chemical ligation is employable for chemically synthesizing full length **proteins**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> d his

     (FILE 'HOME' ENTERED AT 09:56:14 ON 17 SEP 2003)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 09:56:40 ON
     17 SEP 2003
L1        278371 S MASS SPECTROMETRY
L2         43588 S L1 AND PROTEIN
L3           151 S L2 AND QUATERNARY AMINE
L4           127 S L3 AND 250
L5            50 S L3 AND FUNCTIONAL GROUP
L6            39 S L5 AND CLEAV?
L7            39 DUP REM L6 (0 DUPLICATES REMOVED)
L8             5 S L7 AND IONIZED CHARGE
L9         67790 S L1 AND (PROTEIN? OR PEPTIDE OR OLIGOSACCHARIDE OR ANTIBODY OR
L10        35506 S L9 AND (QUATERNARY AMINE OR TERTIARY AMINE OR ACID)
L11        11227 S L10 AND CLEAV?
L12         1656 S L11 AND FUNCTIONAL GROUP
L13            6 S L12 AND IONIZED CHARGE
L14            1 S L13 NOT L5
L15            1 S L13 NOT L8
L16          861 S L12 AND CHARGE
L17          101 S L16 AND IONIZED
L18          100 S L17 AND SINGLE
L19            8 S L18 AND SINGLE CHARGE
L20            8 S L19 NOT L13
L21            8 DUP REM L20 (0 DUPLICATES REMOVED)
L22          431 S L1 AND (PROTEIN? OR PEPTIDE OR OLIGOSACCHARIDE OR ANTIBODY OR
L23          419 S L22 AND (QUATERNARY AMINE OR TERTIARY AMINE OR ACID?)
L24          345 S L23 AND 250
L25          311 S L24 AND CLEAV?
L26         1180 S L1 AND (PROTEIN? OR PEPTIDE OR OLIGOSACCHARIDE OR ANTIBODY OR
L27          289 S L26 AND FUNCTIONAL GROUP?
L28          289 S L27 AND (QUATERNARY AMINE OR TERTIARY AMINE OR ACID?)
L29            0 S L28 AND IONIZED CHARGE
L30          100 S L18 AND CHARGE
L31            8 S L30 AND (PROTEIN? OR PEPTIDE OR OLIGOSACCHARIDE OR ANTIBODY
L32            8 DUP REM L31 (0 DUPLICATES REMOVED)

=> s l1 and (protein? or peptide or oligosaccharide or antibody or drugs) not
nucleic acid?
   3 FILES SEARCHED...
L33       59406 L1 AND (PROTEIN? OR PEPTIDE OR OLIGOSACCHARIDE OR ANTIBODY OR
                DRUGS) NOT NUCLEIC ACID?

=> s l33 and (QUATERNARY AMINE OR TERTIARY AMINE OR ACID?)
L34       30122 L33 AND (QUATERNARY AMINE OR TERTIARY AMINE OR ACID?)

=> s l34 and ionized charge
L35           0 L34 AND IONIZED CHARGE

=> dup rem l34
PROCESSING IS APPROXIMATELY   4% COMPLETE FOR
<------User Break------>

=> s l34 and functional group?
L34 L36        1797 L34 AND FUNCTIONAL GROUP?

=> s l36 and 250
L37        1237 L36 AND 250
```

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=> s l37 and cleav?
L38 717 L37 AND CLEAV?

=> s l38 and charge
L39 188 L38 AND CHARGE

=> s l39 and ioniz?
L40 75 L39 AND IONIZ?

=> dup rem l40
PROCESSING COMPLETED FOR L40
L41 75 DUP REM L40 (0 DUPLICATES REMOVED)

=> d l41 bib abs 1-75

L41 ANSWER 1 OF 75 USPATFULL on STN
AN 2003:243210 USPATFULL
TI Multistate triple-decker dyads in three distinct architectures for information storage applications
IN Lindsey, Jonathan S., Raleigh, NC, UNITED STATES
Bocian, David F., Riverside, CA, UNITED STATES
Schweikart, Karl-Heinz, Nevbulach, GERMANY, FEDERAL REPUBLIC OF
Kuhr, Werner G., Oak Hills, CA, UNITED STATES
PA The Regents of the University of California Office of Technology Transfer (U.S. corporation)
PI US 2003169618 A1 20030911
AI US 2002-79938 A1 20020219 (10)
DT Utility
FS APPLICATION
LREP QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C., P O BOX 458, ALAMEDA, CA, 94501
CLMN Number of Claims: 102
ECL Exemplary Claim: 1
DRWN 33 Drawing Page(s)
LN.CNT 4384
AB This invention provides novel high density memory devices that are electrically addressable permitting effective reading and writing, that provide a high memory density (e.g., 10.sup.15 bits/cm.sup.3), that provide a high degree of fault tolerance, and that are amenable to efficient chemical synthesis and chip fabrication. The devices are intrinsically latchable, defect tolerant, and support destructive or non-destructive read cycles. In a preferred embodiment, the device comprises a fixed electrode electrically coupled to a storage medium having a multiplicity of different and distinguishable oxidation states wherein data is stored in said oxidation states by the addition or withdrawal of one or more electrons from said storage medium via the electrically coupled electrode. The storage medium typically comprises a storage molecule that is a triple-decker sandwich heterodimer. Such dimers can provide 8 or more oxidation states and permit the storage of at least 3 bits per molecule.

L41 ANSWER 2 OF 75 USPATFULL on STN
AN 2003:237900 USPATFULL
TI Method and apparatus for the production of soluble MHC antigens and uses thereof
IN Hildebrand, William H., Edmond, OK, UNITED STATES
Prilliman, Kiley R., San Diego, CA, UNITED STATES
PI US 2003166057 A1 20030904
AI US 2001-22066 A1 20011218 (10)
RLI Continuation-in-part of Ser. No. US 1999-465321, filed on 17 Dec 1999, ABANDONED Continuation-in-part of Ser. No. US 2001-974366, filed on 10

09567863

Oct 2001, PENDING
PRAI US 2000-256410P 20001218 (60)
US 2000-256409P 20001218 (60)
US 2001-327907P 20011009 (60)
US 2001-293261P 20010524 (60)
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73114
CLMN Number of Claims: 44
ECL Exemplary Claim: 1
DRWN 98 Drawing Page(s)
LN.CNT 5145
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The field of the invention relates in general to at least one method and apparatus for the production of soluble MHC antigens and more particularly, but not by way of limitation, to at least one method and apparatus for the production of soluble Class I and II HLA molecules. The field of the invention also includes such produced soluble Class I and II HLA molecules and their use. According to the methodology of the present invention, the soluble Class I and II HLA molecules can be produced from either gDNA or cDNA starting material.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 3 OF 75 USPATFULL on STN
AN 2003:232054 USPATFULL
TI NaPi type IIb polypeptides and methods for making and using same
IN Peerce, Brian E., Friendswood, TX, UNITED STATES
PI US 2003162254 A1 20030828
AI US 2003-345071 A1 20030115 (10)
PRAI US 2002-349280P 20020115 (60)
DT Utility
FS APPLICATION
LREP Braman & Rogalskyj, LLP, P.O. Box 352, Canandaigua, NY, 14424-0352
CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 1634
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are isolated NaPiIIb polypeptides. Also disclosed are methods for screening a test compound for its ability to bind to or otherwise affect the function of Na.sup.+/phosphate cotransporter. The method includes providing an isolated NaPiIIb polypeptide; contacting the isolated NaPiIIb polypeptide with the test compound; and determining whether the test compound binds to or otherwise affects the function of isolated NaPiIIb polypeptide. Antibodies and fragments thereof specific for a isolated NaPiIIb polypeptide are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 4 OF 75 USPATFULL on STN
AN 2003:219656 USPATFULL
TI Bh4-fused polypeptides
IN Shimizu, Shigeomi, Osaka-shi, JAPAN
Tsujimoto, Yoshihide, Toyonaka-shi, JAPAN
PI US 2003152946 A1 20030814
AI US 2002-169223 A1 20020627 (10)
WO 2000-JP9274 20001226
PRAI JP 1999-371449 19991227
DT Utility
FS APPLICATION
LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747

09567863

CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 18 Drawing Page(s)
LN.CNT 1471
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A BH4 fusion polypeptide comprising an amino **acid** sequence of a polypeptide capable of exhibiting uptake action into a cell or a derivative sequence thereof; and an amino **acid** sequence selected from the group consisting of (A) an amino **acid** sequence comprising at least the sequence of BH4 domain (SEQ ID NO: 1) of anti-apoptotic Bcl-2 family **protein**, (B) an amino **acid** sequence having substitution, deletion or insertion of at least one amino **acid** residue in the amino **acid** sequence of SEQ ID NO: 1, and (C) an amino **acid** sequence having at least 50% sequence identity to the amino **acid** sequence of SEQ ID NO: 1, wherein the BH4 fusion polypeptide is capable of inhibiting apoptosis; an apoptosis-inhibitor comprising the BH4 fusion polypeptide mentioned above; a method for treating an ischemic disease, characterized by administering the apoptosis-inhibitor mentioned above to a patient with the ischemic disease to inhibit apoptosis, thereby treating the ischemic disease; and use of the BH4 polypeptide mentioned above, for manufacturing a prophylactic or therapeutic agent for an ischemic disease. According to the present invention, the apoptosis can be efficiently suppressed, so that its application as a therapeutic agent for AIDS, neurodegenerative disorders, osteomyelodysplasia, ischemic diseases, infectious multiple organ failure, fulminant hepatitis, diabetes and the like can be expected.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 5 OF 75 USPATFULL on STN
AN 2003:207824 USPATFULL
TI Cyclic **peptide** structures for molecular scale electronic and photonic devices
IN McGimpsey, William Grant, Boylston, MA, UNITED STATES
PI US 2003144185 A1 20030731
AI US 2002-143733 A1 20020510 (10)
PRAI US 2001-289972P 20010510 (60)
DT Utility
FS APPLICATION
LREP R. Dennis Creehan, Esq., P.O. Box 42, Boston, MA, 02133-0042
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 19 Drawing Page(s)
LN.CNT 1086
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention discloses a family of cyclic **peptide** monomers and supramolecular cyclic **peptide** structures comprising chromophore residues which possess electronic and electro-optic properties for producing molecular scale electronic and photonic devices made from such materials. More particularly, this invention provides for cyclic **peptide** nanotube structures formed from a plurality of stacked cyclic peptides comprising chromophore residues that provide molecular scale electronic conductivity and non linear optical behavior. The stackable cyclic **peptide** is represented by the general formula ##STR1##

wherein R.sub.1 is H, CH.sub.3 or alkyl; wherein R.sub.2 a chromophore or a rigid and flat extended conjugated pi system other than benzene; wherein R.sub.3 is H, CH.sub.3 or a polar or non-polar organic **functional group** used for controlling **peptide**

stacking and solubility; wherein n equals 1 or 2; wherein m equals 4 or 6; and wherein a first adjacent amino **acid** residue has an .alpha.-carbon chirality of L and a second adjacent amino **acid** residue has an .alpha.-carbon chirality of D.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 6 OF 75 USPATFULL on STN
AN 2003:207820 USPATFULL
TI Insoluble compositions for controlling blood glucose
IN Brader, Mark Laurence, Indianapolis, IN, UNITED STATES
PI US 2003144181 A1 20030731
AI US 2003-338101 A1 20030107 (10)
RLI Division of Ser. No. US 1998-217275, filed on 21 Dec 1998, GRANTED, Pat. No. US 6531448
PRAI US 1997-68601P 19971223 (60)
US 1998-88859P 19980611 (60)
US 1998-109940P 19981125 (60)
DT Utility
FS APPLICATION
LREP ELI LILLY AND COMPANY, PATENT DIVISION, P.O. BOX 6288, INDIANAPOLIS, IN, 46206-6288
CLMN Number of Claims: 83
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 4123
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to insoluble compositions comprising a **protein** selected from the group consisting of insulin, insulin analogs, and proinsulins; a derivatized **protein** selected from the group consisting of derivatized insulin, derivatized insulin analog, and derivatized proinsulin; a complexing compound; a hexamer-stabilizing compound; and a divalent metal cation. Formulations of the insoluble composition are suitable for both parenteral and non-parenteral delivery for treating hyperglycemia and diabetes. Microcrystal forms of the insoluble precipitate are pharmaceutically analogous to the neutral protamine Hagedorn (NPH) insulin crystal form. Surprisingly, it has been discovered that suspension formulations of such insoluble compositions possess unique and controllable dissolution properties that provide therapeutically advantageous glucodynamics compared with insulin NPH formulations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 7 OF 75 USPATFULL on STN
AN 2003:165941 USPATFULL
TI Method for generating, screening and dereplicating natural product libraries for the discovery of therapeutic agents
IN Jia, Qi, Superior, CO, UNITED STATES
Hong, Mei-Feng, Northglenn, CO, UNITED STATES
PA UNIGEN PHARMACEUTICALS, INC., Broomfield, CO (U.S. corporation)
PI US 2003113797 A1 20030619
AI US 2002-185758 A1 20020627 (10)
PRAI US 2001-301523P 20010627 (60)
DT Utility
FS APPLICATION
LREP SWANSON & BRATSCHUN L.L.C., 1745 SHEA CENTER DRIVE, SUITE 330, HIGHLANDS RANCH, CO, 80129
CLMN Number of Claims: 71
ECL Exemplary Claim: 1
DRWN 42 Drawing Page(s)
LN.CNT 2449

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to a technology platform, referred to as Phytologix.TM. for the discovery of novel bioactive pharmaceutical, nutraceutical and cosmetic agents. Specifically, this invention includes an integrated system for the collection of medicinal plants and creation of informatic databases related to these plants. This invention also relates to an improved standardized extraction and fractionation process, which provides significant advantages over the prior art in the terms of simplicity, efficiency of the separations, the quality of the library, low cost of the process and extraordinary throughput. This invention provides details to the structure dereplication process by utilizing the technology such as HPLC/PDA/MS coupled with high throughput bioassay data and an internal pure compound library. It has been proven to be much more efficient and accurate when compared to the prior art methods. Finally, the Phytologix.TM. platform has been approved as a realistic and efficient process by the demonstration of the whole process of discovery and development of natural COX-2 and tyrosinase inhibitors as novel nutraceutical and cosmetic products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 8 OF 75 USPATFULL on STN

AN 2003:146373 USPATFULL

TI Combinatorial synthesis and screening of supported organometallic compounds and catalysts

IN Weinberg, W. Henry, Palo Alto, CA, UNITED STATES
McFarland, Eric, Santa Barbara, CA, UNITED STATES
Goldwasser, Isy, Palo Alto, CA, UNITED STATES
Boussie, Thomas, Menlo Park, CA, UNITED STATES
Turner, Howard, Campbell, CA, UNITED STATES
Van Beek, Johannes A.M., Brussels, CA, UNITED STATES
Murphy, Vince, Cupertino, CA, UNITED STATES
Powers, Tim, San Francisco, CA, UNITED STATES

PA Symyx Technologies, Inc. (U.S. corporation)

PI US 2003100119 A1 20030529

AI US 2002-269362 A1 20021011 (10)

RLI Continuation of Ser. No. US 1999-337047, filed on 21 Jun 1999, ABANDONED Continuation-in-part of Ser. No. US 1998-127660, filed on 31 Jul 1998, GRANTED, Pat. No. US 6420179 Division of Ser. No. US 1994-327513, filed on 18 Oct 1994, GRANTED, Pat. No. US 5985356

PRAI US 1997-48987P 19970609 (60)
US 1997-35366P 19970110 (60)
US 1996-16102P 19960723 (60)
US 1996-28106P 19961009 (60)
US 1996-29255P 19961025 (60)

DT Utility

FS APPLICATION

LREP SENNIGER POWERS LEAVITT AND ROEDEL, ONE METROPOLITAN SQUARE, 16TH FLOOR, ST LOUIS, MO, 63102

CLMN Number of Claims: 89

ECL Exemplary Claim: 1

DRWN 27 Drawing Page(s)

LN.CNT 3159

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates, inter alia, to methodologies for the synthesis, screening and characterization of organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention provide for the combinatorial synthesis, screening and characterization of libraries of supported and unsupported organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention can be applied to the preparation

and screening of large numbers of organometallic compounds which can be used not only as catalysts (e.g., homogeneous catalysts), but also as additives and therapeutic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 9 OF 75 USPATFULL on STN
AN 2003:145888 USPATFULL
TI Method for preparing a purified matrix metalloproteinase
IN Mueller, William Thomas, Saline, MI, UNITED STATES
Pavlovsky, Alexander Gregory, Ann Arbor, MI, UNITED STATES
Thanabal, Venkataraman, Ann Arbor, MI, UNITED STATES
Yan, Chunhong, Ann Arbor, MI, UNITED STATES
PI US 2003099632 A1 20030529
AI US 2002-271490 A1 20021016 (10)
PRAI US 2001-348102P 20011018 (60)
DT Utility
FS APPLICATION
LREP WARNER-LAMBERT COMPANY, 2800 PLYMOUTH RD, ANN ARBOR, MI, 48105
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 916
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides a method of preparing a purified MMP, the method comprising adding a ligand to a catalytic zinc cation of the MMP to a solution of a pro form of the MMP.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 10 OF 75 USPATFULL on STN
AN 2003:127913 USPATFULL
TI Diaryl ether condensation reactions
IN Marcoux, Jean-Francois, Westfield, NJ, UNITED STATES
Doye, Sven, Hannover, GERMANY, FEDERAL REPUBLIC OF
Buchwald, Stephen, Newton, MA, UNITED STATES
PI US 2003088128 A1 20030508
AI US 2002-132884 A1 20020425 (10)
RLI Continuation of Ser. No. US 1998-166760, filed on 5 Oct 1998, GRANTED, Pat. No. US 6395939
PRAI US 1997-61114P 19971006 (60)
DT Utility
FS APPLICATION
LREP FOLEY HOAG LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02110-2600
CLMN Number of Claims: 72
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2697
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB One aspect of the present invention relates to novel reaction conditions that allow the efficient synthesis of diaryl ethers from arenes bearing a leaving group and arenols under relatively mild conditions. Another aspect of the present invention relates to the dramatic effects of acidic activators on Ullmann-type couplings involving electron-poor and/or relatively insoluble substrates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 11 OF 75 USPATFULL on STN
AN 2003:93845 USPATFULL
TI Derivatization and solubilization of insoluble classes of fullerenes

09567863

IN Bolskar, Robert D., Boulder, CO, UNITED STATES
Alford, J. Michael, Lakewood, CO, UNITED STATES
PI US 2003065206 A1 20030403
AI US 2002-263375 A1 20021001 (10)
PRAI US 2002-371380P 20020409 (60)
US 2001-326353P 20011001 (60)
DT Utility
FS APPLICATION
LREP GREENLEE WINNER AND SULLIVAN P C, 5370 MANHATTAN CIRCLE, SUITE 201, BOULDER, CO, 80303
CLMN Number of Claims: 55
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 2336
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides improved methods for the derivatization and solubilization of fullerenes, which are particularly useful for those fullerenes that are normally insoluble and which are specifically applied, among others, to endohedral fullerenes, including endohedral metallofullerenes; empty fullerenes, including small-bandgap fullerenes and other insoluble fullerenes and to very high molecular weight fullerenic materials generated in fullerenic soot, including giant fullerenes, fullerenic polymers, carbon nanotubes and metal-carbon nanoencapsulates. More specifically the invention relates to improved methods for cyclopropanation of fullerenes. Specific reaction conditions are provided which allow for cyclopropanation reactions to be successfully performed for the first time on insoluble classes of fullerenes. Also provided is a method for purification of one or more fullerenes from a fullerenic material containing the one or more fullerenes in addition to non-fullerenic carbonaceous material, particularly amorphous carbonaceous material, by derivatizing one or more fullerenes using the methods of the invention and separating soluble derivatizes fullerenes from insoluble materials.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 12 OF 75 USPATFULL on STN
AN 2003:86346 USPATFULL
TI Method and product for the sequence determination of peptides using a mass spectrometer
IN Chait, Brian T., New York, NY, UNITED STATES
Beavis, Ronald, St. John's, CANADA
Wang, Rong, New York, NY, UNITED STATES
Kent, Stephen B.H., La Jolla, CA, UNITED STATES
PI US 2003059952 A1 20030327
AI US 2001-828326 A1 20010405 (9)
RLI Continuation of Ser. No. US 1996-341555, filed on 24 Jun 1996, GRANTED, Pat. No. US 6271037 Continuation-in-part of Ser. No. US 1992-891177, filed on 29 May 1992, ABANDONED
PRAI WO 1993-WO24834 19930527
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN 16 Drawing Page(s)
LN.CNT 1362
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Method is described for sequencing polypeptides by forming peptide ladders comprising a series of polypeptides in which adjacent members of the series vary by one amino acid residue

and determining the identity and position of each amino **acid** in the polypeptide by mass spectroscopy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 13 OF 75 USPATFULL on STN
AN 2003:85917 USPATFULL
TI Focused acoustic energy in the preparation of **peptide** arrays
IN Mutz, Mitchell W., Palo Alto, CA, UNITED STATES
Ellson, Richard N., Palo Alto, CA, UNITED STATES
PI US 2003059522 A1 20030327
AI US 2002-271940 A1 20021015 (10)
RLI Continuation of Ser. No. US 2001-963173, filed on 25 Sep 2001, PENDING
Continuation-in-part of Ser. No. US 2000-669997, filed on 25 Sep 2000, ABANDONED
DT Utility
FS APPLICATION
LREP REED & EBERLE LLP, 800 MENLO AVENUE, SUITE 210, MENLO PARK, CA, 94025
CLMN Number of Claims: 35
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 1750
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to arrays of peptidic molecules and the preparation of **peptide** arrays using focused acoustic energy. The arrays are prepared by acoustically ejecting **peptide** -containing fluid droplets from individual reservoirs towards designated sites on a substrate for attachment thereto.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 14 OF 75 USPATFULL on STN
AN 2003:79105 USPATFULL
TI Peroxynitrite decomposition catalysts and methods of use thereof
IN Groves, John T., Princeton, NJ, UNITED STATES
Moeller, Suzanne M., Princeton, NJ, UNITED STATES
PI US 2003055032 A1 20030320
AI US 2002-207323 A1 20020729 (10)
RLI Continuation of Ser. No. US 2000-587382, filed on 1 Jun 2000, GRANTED, Pat. No. US 6448239
PRAI US 1999-137308P 19990603 (60)
DT Utility
FS APPLICATION
LREP MINTZ LEVIN, One Financial Center, Boston, MA, 02111
CLMN Number of Claims: 25
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 1131
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides a novel class of substituted macrocyclic metallic complexes. The complexes are useful as peroxynitrite decomposition catalysts. Pharmaceutical compositions, and methods of making and using the compounds, or a pharmaceutically acceptable salt, hydrate, prodrug, or mixture thereof are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 15 OF 75 USPATFULL on STN
AN 2003:11189 USPATFULL
TI Modulators of chemokine receptor activity
IN Colon-Cruz, Roberto, Groton, CT, UNITED STATES
Didiuk, Mary T., Groton, CT, UNITED STATES

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Duffy, Erin M., Deep River, CT, UNITED STATES
Garigipati, Ravi, South Glastonbury, CT, UNITED STATES
Lau, Wan F., Noank, CT, UNITED STATES
McDonald, Wayne S., East Lyme, CT, UNITED STATES
PI US 2003008893 A1 20030109
AI US 2002-93273 A1 20020306 (10)
PRAI US 2001-273984P 20010307 (60)
DT Utility
FS APPLICATION
LREP Gregg C. Benson, Pfizer Inc., Patent Department, MS 4159, Eastern Point Road, Groton, CT, 06340
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 6111
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Chemokine receptor antagonists, in particular, bicyclic diamine compounds of Formula (I) that act as antagonists of chemokine CCR2 and CCR3 receptors including pharmaceutical compositions and uses thereof to treat or prevent diseases associated with monocyte accumulation, lymphocyte accumulation or leucocyte accumulation are described herein. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 16 OF 75 USPATFULL on STN
AN 2003:10710 USPATFULL
TI Fluorescent metal sensors, and methods of making and using the same
IN Lippard, Stephen J., Cambridge, MA, UNITED STATES
Burdette, Shawn, Cambridge, MA, UNITED STATES
PI US 2003008405 A1 20030109
AI US 2002-124742 A1 20020417 (10)
PRAI US 2001-284700P 20010417 (60)
DT Utility
FS APPLICATION
LREP FOLEY HOAG LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02110-2600
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 2085
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed, in part, to fluorescent metal sensors for detecting metal ions, and methods of making and using the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 17 OF 75 USPATFULL on STN
AN 2003:197164 USPATFULL
TI Phosphate mimics and methods of treatment using phosphatase inhibitors
IN Huang, Ping, Mountain View, CA, United States
Wei, Chung Chen, Foster City, CA, United States
Tang, Peng Cho, Moraga, CA, United States
Liang, Chris, Sunnyvale, CA, United States
Ramphal, John, Union City, CA, United States
Jallal, Bahija, Menlo Park, CA, United States
Biltz, John, Newark, CA, United States
Li, Sharon, Los Altos, CA, United States
Mattson, Matt, Santa Clara, CA, United States
McMahon, Gerald, Kenwood, CA, United States
Koenig, Marcel, Burlingame, CA, United States
PA Sugen, Inc., South San Francisco, CA, United States (U.S. corporation)

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PI US 6596772 B1 20030722
AI US 2000-645879 20000825 (9)
PRAI US 1999-150970P 19990827 (60)
US 1999-165365P 19991112 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Raymond, Richard L.; Assistant Examiner: Patel, Sudhaker B.
LREP Burrous, Beth A., Foley & Lardner
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 14 Drawing Figure(s); 14 Drawing Page(s)
LN.CNT 6804
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to trifluoromethyl sulfonyl and trifluoromethyl sulfonamido compounds and the physiologically acceptable salts and the prodrugs thereof. These compounds are expected to modulate the activity of **protein** tyrosine enzymes which are related to cellular signal transduction, in particular, **protein** tyrosine phosphatase, and therefore are expected to be useful in the prevention and treatment of disorders associated with abnormal **protein** tyrosine enzyme related cellular signal transduction such as cancer, diabetes, immuno-modulation, neurologic degenerative diseases, osteoporosis and infectious diseases. The invention also relates to the use of compounds containing fluoromethyl sulfonyl groups as phosphate mimics. These mimics may be used to inhibit, regulate or modulate the activity of a phosphate binding **protein** in a cell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 18 OF 75 USPATFULL on STN
AN 2003:183986 USPATFULL
TI Aldol consensations by catalytic antibodies
IN Barbas, Carlos F., Solana Beach, CA, United States
Lerner, Richard A., La Jolla, CA, United States
Zhong, Guofu, San Diego, CA, United States
List, Benjamin, San Diego, CA, United States
PA The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)
PI US 6589766 B1 20030708
AI US 2001-965512 20010925 (9)
RLI Division of Ser. No. US 2000-573753, filed on 18 May 2000, now patented, Pat. No. US 6326176 Continuation-in-part of Ser. No. WO 1998-US26942, filed on 18 Dec 1998
PRAI US 1999-135411P 19990521 (60)
US 1997-68049P 19971218 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP Northrup, Thomas E.
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 51 Drawing Figure(s); 45 Drawing Page(s)
LN.CNT 2681
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Catalytic antibodies, including 38C2 and 33F12, are capable of efficiently catalyzing a wide variety of ketone-ketone, ketone-aldehyde, aldehyde-ketone, and aldehyde-aldehyde intermolecular aldol reactions, and in some cases to catalyze their subsequent dehydration to yield aldol condensation products. A number of intramolecular aldol reactions have also been defined. Catalysis of all intramolecular aldol reactions examined yields the corresponding condensation products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 19 OF 75 USPATFULL on STN
AN 2003:74390 USPATFULL
TI Synthetic polysaccharides, preparation method therefor and pharmaceutical compositions containing same
IN Driguez, Pierre Alexandre, Toulouse, FRANCE
Duchaussoy, Philippe, Toulouse, FRANCE
Herbert, Jean Marc, Tourefeuille, FRANCE
Petitou, Maurice, Paris Cedex, FRANCE
Van Boeckel, Constant, Oss, NETHERLANDS
Grootenhuis, Peter, San Diego, CA, United States
Basten, Johannes, Afferden, NETHERLANDS
Dreef-Tromp, Cornelia, Wijchen, NETHERLANDS
PA Sanofi-Synthelabo, Paris, FRANCE (non-U.S. corporation)
Akzo Nobel, Arnhem, NETHERLANDS (non-U.S. corporation)
PI US 6534481 B1 20030318
WO 9803554 19980129
AI US 1999-230139 19990907 (9)
WO 1997-FR1344 19970708
PRAI FR 1996-9116 19960719
DT Utility
FS GRANTED
EXNAM Primary Examiner: Fonda, Kathleen K.
LREP Dupont, Paul E., Alexander, Michael D.
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 3729
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A synthetic polysaccharide including an antithrombin III binding domain consisting of a concatenation of five monosaccharides supporting a total of two carboxylic **acid** functions and at least four sulpho groups, said domain being directly bound at the non-reducing end by a thrombin binding domain including a concatenation of 10-25 monosaccharide units selected from hexoses, pentoses or deoxy sugars of which all the hydroxyl groups are etherified by a C.sub.1-6 alkyl group or esterified in the form of sulpho groups, as well as salts and particularly pharmaceutically acceptable salts thereof, are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 20 OF 75 USPATFULL on STN
AN 2003:67751 USPATFULL
TI Insoluble compositions for controlling blood glucose
IN Brader, Mark Laurence, Indianapolis, IN, United States
PA Eli Lilly and Company, Indianapolis, IN, United States (U.S. corporation)
PI US 6531448 B1 20030311
AI US 1998-217275 19981221 (9)
PRAI US 1997-68601P 19971223 (60)
US 1998-88859P 19980611 (60)
US 1998-109940P 19981125 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Celsa, Bennett
LREP Reed, Grant E., Kelley, James J., Apelgren, Lynn D.
CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 3802

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to insoluble compositions comprising a **protein** selected from the group consisting of insulin, insulin analogs, and proinsulins; a derivatized **protein** selected from the group consisting of derivatized insulin, derivatized insulin analog, and derivatized proinsulin; a complexing compound; a hexamer-stabilizing compound; and a divalent metal cation. Formulations of the insoluble composition are suitable for both parenteral and non-parenteral delivery for treating hyperglycemia and diabetes. Microcrystal forms of the insoluble precipitate are pharmaceutically analogous to the neutral protamine Hagedorn (NPH) insulin crystal form. Surprisingly, it has been discovered that suspension formulations of such insoluble compositions possess unique and controllable dissolution properties that provide therapeutically advantageous glucodynamics compared with insulin NPH formulations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 21 OF 75 USPATFULL on STN
AN 2003:60214 USPATFULL
TI Ligands for metabotropic glutamate receptors and inhibitors of NAALADase
IN Kozikowski, Alan P., Princeton, NJ, United States
Wroblewski, Jarda T., Kensington, MD, United States
Nan, Fajun, Washington, DC, United States
PA Georgetown University, Washington, DC, United States (U.S. corporation)
PI US 6528499 B1 20030304
AI US 2000-662767 20000915 (9)
RLI Continuation-in-part of Ser. No. US 2000-559978, filed on 27 Apr 2000
DT Utility
FS GRANTED
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Truong, Tamthom N.
LREP Gordon, Dana M., Foley Hoag, LLP
CLMN Number of Claims: 39
ECL Exemplary Claim: 1
DRWN 34 Drawing Figure(s); 34 Drawing Page(s)
LN.CNT 3131
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel compounds and formulations thereof which compounds are ligands, e.g., agonists or antagonists, for a metabotropic glutamate receptor or a NAALADase enzyme or both. The present invention also relates to methods of modulating the activity of a metabotropic glutamate receptor or a NAALADase enzyme or both, e.g., in a subject in need thereof, using a compound or formulation of the present invention. The present invention also relates to methods of treating a subject suffering from a chronic or acute disease, malady or condition due at least in part to an abnormality in the activity of an endogenous metabotropic glutamate receptor or a NAALADase enzyme or both, using a compound or formulation of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 22 OF 75 USPATFULL on STN
AN 2003:60206 USPATFULL
TI Site-specific preparation of polyethylene glycol-grf conjugates
IN Veronese, Francesco Maria, Padova, ITALY
Caliceti, Paolo, Padova, ITALY
Schiavon, Oddone, Padova, ITALY
PA Applied Research Systems ARS Holding N.V., Curacao, NETHERLANDS ANTILLES (non-U.S. corporation)
PI US 6528485 B1 20030304
AI US 2000-587460 20000605 (9)

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RLI Continuation of Ser. No. WO 1998-EP7748, filed on 1 Dec 1998
PRAI EP 1997-121264 19971203
DT Utility
FS GRANTED
EXNAM Primary Examiner: Cochrane Carlson, Karen; Assistant Examiner: Kam, Chin-Min
LREP Browdy and Neimark, PLLC
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 14 Drawing Page(s)
LN.CNT 1185
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Described are various human growth hormone releasing factor-PEG conjugates as well as their pharmaceutical use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 23 OF 75 USPATFULL on STN
AN 2003:20218 USPATFULL
TI Linear cyclodextrin copolymers
IN Davis, Mark E., Pasadena, CA, United States
Gonzalez, Hector, San Francisco, CA, United States
Hwang, Suzie (Sue Jean), Torrance, CA, United States
PA California Institute of Technology, Pasadena, CA, United States (U.S. corporation)
PI US 6509323 B1 20030121
AI US 1998-203556 19981202 (9)
PRAI US 1998-91550P 19980701 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Richter, Johann; Assistant Examiner: Crane, L. E.
LREP Morgan, Lewis & Bockius LLP
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 2 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1222
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Linear cyclodextrin copolymers and linear oxidized cyclodextrin copolymers containing an unoxidized and/or an oxidized cyclodextrin moiety integrated into the polymer backbone are described. Methods of preparing such copolymers are also described. The linear cyclodextrin copolymer and linear oxidized cyclodextrin copolymer of the invention may be used as a delivery vehicle of various therapeutic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 24 OF 75 USPATFULL on STN
AN 2002:288134 USPATFULL
TI Antiinflammation agents
IN Browner, Michelle F., San Francisco, CA, UNITED STATES
Clark, David L., Albany, CA, UNITED STATES
Cushing, Timothy D., Pacifica, CA, UNITED STATES
Hao, Xiaolin, So. San Francisco, CA, UNITED STATES
Hawley, Ronald C., Mountain View, CA, UNITED STATES
He, Xiao, Foster City, CA, UNITED STATES
Jaen, Juan C., Burlingame, CA, UNITED STATES
Labadie, Sharada S., Sunnyvale, CA, UNITED STATES
Smith, Marie-Louise, Half Moon Bay, CA, UNITED STATES
Talamas, Francisco X., Mountain View, CA, UNITED STATES
Walker, Nigel P.C., Burlingame, CA, UNITED STATES
Labelle, Marc, Burlingame, CA, UNITED STATES
PA Syntex (U.S.A.) LLC, Palo Alto, CA, UNITED STATES (U.S. corporation)

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PI US 2002161004 A1 20021031
AI US 2001-4287 A1 20011023 (10)
PRAI US 2000-243582P 20001026 (60)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 101
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3573
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds, compositions and methods that are useful in the treatment of inflammatory, immunoregulatory, metabolic and cell proliferative conditions or diseases are provided herein. In particular, the invention provides compounds which modulate the expression and/or function of proteins involved in inflammation, metabolism and cell proliferation. The subject compounds contain fused carbocyclic or heterocyclic rings.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 25 OF 75 USPATFULL on STN
AN 2002:280628 USPATFULL
TI Biphenyl sulfonamides useful as matrix metalloproteinase inhibitors
IN Barvian, Nicole Chantel, Ann Arbor, MI, UNITED STATES
O'Brien, Patrick Michael, Stockbridge, MI, UNITED STATES
Patt, William Chester, Chelsea, MI, UNITED STATES
Sliskovic, Drago Robert, Saline, MI, UNITED STATES
PI US 2002156074 A1 20021024
AI US 2002-74667 A1 20020213 (10)
PRAI US 2001-268755P 20010214 (60)
DT Utility
FS APPLICATION
LREP Claude F. Purchase, Jr., Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI, 48105
CLMN Number of Claims: 36
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2120
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Inhibitors of MMP enzymes are cyclic sulfonamides of Formula I ##STR1##

Or a pharmaceutically acceptable salt thereof, and cyclic sulfonamides of Formula III ##STR2##

Or a pharmaceutically acceptable salt thereof,

wherein R.sup.1 and R.sup.2 include hydrogen, alkyl, and substituted alkyl; R.sup.3 and R.sup.4 include hydrogen, halo, and alkyl; X is OH or NHOH. The compounds of Formulas I and III are useful for the treatment of diseases mediated by an MMP enzyme, including cancer, osteoarthritis, rheumatoid arthritis, heart failure, and inflammation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 26 OF 75 USPATFULL on STN
AN 2002:273395 USPATFULL
TI Linear cyclodextrin copolymers
IN Davis, Mark E., Pasadena, CA, UNITED STATES
Gonzalez, Hector, San Francisco, CA, UNITED STATES

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Hwang, Suzie (Sue Jean), Torrance, CA, UNITED STATES
PA California Institute of Technology (U.S. corporation)
PI US 2002151523 A1 20021017
AI US 2002-97326 A1 20020315 (10)
RLI Division of Ser. No. US 1999-339818, filed on 25 Jun 1999, PENDING
Continuation-in-part of Ser. No. US 1998-203556, filed on 2 Dec 1998, PENDING
PRAI US 1998-91550P 19980701 (60)
DT Utility
FS APPLICATION
LREP MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004
CLMN Number of Claims: 45
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1430
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Linear cyclodextrin copolymers and linear oxidized cyclodextrin copolymers containing an unoxidized and/or an oxidized cyclodextrin moiety integrated into the polymer backbone are described. Methods of preparing such copolymers are also described. The linear cyclodextrin copolymer and linear oxidized cyclodextrin copolymer of the invention may be used as a delivery vehicle of various therapeutic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 27 OF 75 USPATFULL on STN
AN 2002:266477 USPATFULL
TI Synthesis of 2-Hydroxymethylglutamic **acid** and congeners thereof
IN Kozikowski, Alan P., Princeton, NJ, UNITED STATES
PI US 2002147362 A1 20021010
US 6599940 B2 20030729
AI US 2001-952325 A1 20010913 (9)
PRAI US 2000-232275P 20000913 (60)
DT Utility
FS APPLICATION
LREP FOLEY HOAG LLP, PATENT GROUP, 155 SEAPORT BOULEVARD, BOSTON, MA, 02110
CLMN Number of Claims: 35
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 1922
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB One aspect of the present invention relates to 2-hydroxymethylglutamic **acid** and congeners thereof. A second aspect of the invention relates to a method of synthesizing 2-hydroxymethylglutamic **acid** and congeners thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 28 OF 75 USPATFULL on STN
AN 2002:236057 USPATFULL
TI Compounds to treat alzheimer's disease
IN Beck, James P., Kalamazoo, MI, UNITED STATES
Fang, Lawrence Y., Foster City, CA, UNITED STATES
Freskos, John N., Clayton, MO, UNITED STATES
Gailunas, Andrea, San Francisco, CA, UNITED STATES
Hom, Roy, San Francisco, CA, UNITED STATES
Jagodzinska, Barbara, Redwood City, CA, UNITED STATES
John, Varghese, San Francisco, CA, UNITED STATES
Maillard, Michel, Redwood Shores, CA, UNITED STATES
Pulley, Shon R., Hickory Corners, MI, UNITED STATES

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TenBrink, Ruth E., Kalamazoo, MI, UNITED STATES
PI US 2002128255 A1 20020912
AI US 2001-896139 A1 20010629 (9)
PRAI US 2000-215323P 20000630 (60)
US 2000-252736P 20001122 (60)
US 2000-255956P 20001215 (60)
US 2001-268497P 20010213 (60)
US 2001-279779P 20010329 (60)
US 2001-295589P 20010604 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 221
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 21437
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is substituted amines of formula (X) ##STR1##

and of the formula (X') ##STR2##

useful in treating Alzheimer's disease and other similar diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 29 OF 75 USPATFULL on STN
AN 2002:185559 USPATFULL
TI POLYMERIZATION METHOD FROM THE COMBINATORIAL SYNTHESIS AND ANALYSIS OF ORGANOMETALLIC COMPOUNDS AND CATALYSTS
IN WEINBERG, W. HENRY, WOODSIDE, CA, UNITED STATES
MCFARLAND, ERIC, SAN JOSE, CA, UNITED STATES
GOLDWASSER, ISY, MENLO PARK, CA, UNITED STATES
BOUSSIE, THOMAS, MENLO PARK, CA, UNITED STATES
TURNER, HOWARD, CAMPBELL, CA, UNITED STATES
VAN BEEK, JOHANNES A.M., MOUNTAIN VIEW, CA, UNITED STATES
MURPHY, VINCE, CUPERTINO, CA, UNITED STATES
POWERS, TIMOTHY, SAN FRANCISCO, CA, UNITED STATES
PI US 2002098471 A1 20020725
AI US 1999-235368 A1 19990121 (9)
PRAI US 1997-48987P 19970609 (60)
US 1997-35366P 19970110 (60)
US 1996-29255P 19961025 (60)
US 1996-28106P 19961009 (60)
US 1996-16102P 19960723 (60)
DT Utility
FS APPLICATION
LREP SENNIGER POWERS LEAVITT AND ROEDEL, ONE METROPOLITAN SQUARE, 16TH FLOOR, ST LOUIS, MO, 63102
CLMN Number of Claims: 89
ECL Exemplary Claim: 1
DRWN 28 Drawing Page(s)
LN.CNT 3087
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates, inter alia, to methodologies for the synthesis, screening and characterization of organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention provide for the combinatorial synthesis, screening and characterization of libraries of supported and unsupported organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention can be applied to the preparation and screening of large numbers of organometallic compounds which can be used not only as catalysts (e.g., homogeneous catalysts), but also as

additives and therapeutic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 30 OF 75 USPATFULL on STN
AN 2002:171903 USPATFULL
TI Inverse labeling method for the rapid identification of marker/target **proteins**
IN Fu, Emil Wei-Ming, East Hanover, NJ, UNITED STATES
Ma, Zhixiang, Philadelphia, PA, UNITED STATES
Quinn, Douglas Frederick, Morristown, NJ, UNITED STATES
Wang, Yingqi Karen, East Hanover, NJ, UNITED STATES
PI US 2002090652 A1 20020711
AI US 2001-16627 A1 20011210 (10)
PRAI US 2000-257559P 20001222 (60)
US 2001-332965P 20011119 (60)
DT Utility
FS APPLICATION
LREP THOMAS HOXIE, NOVARTIS CORPORATION, PATENT AND TRADEMARK DEPT, 564 MORRIS AVENUE, SUMMIT, NJ, 079011027
CLMN Number of Claims: 49
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 1696
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel procedure for performing **protein** labeling for comparative proteomics termed inverse labeling is provided for the rapid identification of marker or target **proteins**. With this method, to evaluate **protein** expression of a disease or a drug treated sample in comparison with a control sample, two converse collaborative labeling experiments are performed in parallel. In one experiment the perturbed sample (by disease or by drug treatment) is isotopically heavy-labeled, whereas, the control is isotopically heavy-labeled in the second experiment. When mixed and analyzed with its unlabeled or isotope light counterpart for differential comparison, a characteristic inverse labeling pattern is observed between the two parallel analyses for **proteins** that are differentially expressed to an appreciable level. In particularly useful embodiments, **protein** labeling is achieved through proteolytic .sup.18O-incorporation into peptides as a result of proteolysis performed in .sup.18O-water, metabolic incorporation of .sup.15N (or .sup.13C and .sup.2H) into **proteins**, and chemically tagging **proteins** with an isotope-coded tag reagent such as an isotope-coded affinity tag reagent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 31 OF 75 USPATFULL on STN
AN 2002:164715 USPATFULL
TI Novel compound and methods of diagnosis using the compound
IN Gahunia, Harpal Kaur, Warsaw, IN, UNITED STATES
Pritzker, Kenneth, Toronto, CANADA
Vieth, Reinhold, Toronto, CANADA
PI US 2002086333 A1 20020704
AI US 2001-966840 A1 20010928 (9)
RLI Continuation of Ser. No. WO 2000-CA750, filed on 22 Jun 2000, UNKNOWN
PRAI US 1999-140350P 19990622 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)

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LN.CNT 2047
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel cartilage-specific compound and methods of diagnosis in medical and veterinary contexts using the compound. Screening methods for therapeutic substances and methods of treatment are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 32 OF 75 USPATFULL on STN
AN 2002:148674 USPATFULL
TI Labeling of proteomic samples during proteolysis for quantitation and sample multiplexing
IN Figeys, Daniel, Pickering, CANADA
Mann, Matthias, Odense, DENMARK
Stewart, Ian I., Toronto, CANADA
PI US 2002076817 A1 20020620
AI US 2001-878750 A1 20010611 (9)
PRAI US 2000-210496P 20000609 (60)
US 2001-293664P 20010525 (60)
DT Utility
FS APPLICATION
LREP ROPES & GRAY, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624
CLMN Number of Claims: 61
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 1995
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention related to methods useful in the labeling of multiple polypeptide samples and subsequent analysis of these samples by **mass spectrometry**, particularly in the high throughput proteomic setting.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 33 OF 75 USPATFULL on STN
AN 2002:133453 USPATFULL
TI Bioelastomer nanomachines and biosensors
IN Urry, Dan W., Birmingham, AL, UNITED STATES
PI US 2002068304 A1 20020606
AI US 2001-888260 A1 20010621 (9)
PRAI US 2000-213364P 20000623 (60)
DT Utility
FS APPLICATION
LREP COOLEY GODWARD, LLP, 3000 EL CAMINO REAL, 5 PALO ALTO SQUARE, PALO ALTO, CA, 94306
CLMN Number of Claims: 56
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 2422
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Bioelastomers, having repeating **peptide** monomeric units selected from the group consisting of bioelastic nonapeptides, pentapeptides and tetrapeptides, are used to produce nanomachines and biosensors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 34 OF 75 USPATFULL on STN
AN 2002:124712 USPATFULL
TI Methods and apparatus for **mass spectrometry**
IN Bateman, Robert Harold, Knutsford, UNITED KINGDOM
Hoyes, John Brian, Stockport, UNITED KINGDOM

09567863

Clayton, Edward James, Macclesfield, UNITED KINGDOM
PI US 2002063206 A1 20020530
AI US 2001-876122 A1 20010608 (9)
PRAI GB 2000-14062 20000609
GB 2001-1048 20010115
GB 2001-5227 20010302
DT Utility
FS APPLICATION
LREP DIEDERIKS & WHITELAW, PLC, 12471 Dillingham Square, #301, Woodbridge, VA, 22192
CLMN Number of Claims: 60
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 981
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method is disclosed of identifying parent ions by matching daughter ions found to be produced at substantially the same time that the parent ions elute from a mixture. Ions emitted from an ion source are incident upon a collision cell which alternately and repeatedly switches between a first mode wherein the ions are substantially fragmented to produce daughter ions and a second mode wherein the ions are not substantially fragmented. Mass spectra are taken in both modes, and at the end of an experimental run parent and daughter ions are recognized by comparing the mass spectra obtained in the two different modes. Daughter ions are matched to particular parent ions on the basis of the closeness of fit of their elution times, and this enables parent ions to then be identified.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 35 OF 75 USPATFULL on STN
AN 2002:66707 USPATFULL
TI Focused acoustic energy in the preparation of **peptide** arrays
IN Mutz, Mitchell W., Palo Alto, CA, UNITED STATES
Ellson, Richard N., Palo Alto, CA, UNITED STATES
PI US 2002037359 A1 20020328
AI US 2001-963173 A1 20010925 (9)
RLI Continuation-in-part of Ser. No. US 2000-669997, filed on 25 Sep 2000, PENDING
DT Utility
FS APPLICATION
LREP REED & ASSOCIATES, 800 MENLO AVENUE, SUITE 210, MENLO PARK, CA, 94025
CLMN Number of Claims: 60
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 1823
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to arrays of peptidic molecules and the preparation of **peptide** arrays using focused acoustic energy. The arrays are prepared by acoustically ejecting **peptide** -containing fluid droplets from individual reservoirs towards designated sites on a substrate for attachment thereto.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 36 OF 75 USPATFULL on STN
AN 2002:43866 USPATFULL
TI Delivery systems for periadventitial delivery for treatment of restenosis and anastomotic intimal hyperplasia
IN Helmus, Michael N., Worcester, MA, UNITED STATES
Cunanan, Crystal M., Mission Viejo, CA, UNITED STATES
Tremble, Patrice, Santa Rosa, CA, UNITED STATES

09567863

PI US 2002026236 A1 20020228
AI US 2001-771480 A1 20010125 (9)
PRAI US 2000-178087P 20000125 (60)
DT Utility
FS APPLICATION
LREP Debra D. Condino, Esq., Edwards Lifesciences Corp., c/o Edwards Lifesciences LLC, One Edwards Way, Irvine, CA, 92614
CLMN Number of Claims: 66
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2055
AB The invention provides methods for treating injuries to one or more internal structures of a subject by administering a drug delivery vehicle to an external surface of the injured structure. The drug delivery vehicle substantially adheres to the site of administration and provides for the release of a bioactive agent that reduces or prevents further injury to the internal structure by disease processes, such as hyperplasia.

L41 ANSWER 37 OF 75 USPATFULL on STN
AN 2002:22113 USPATFULL
TI Metallopeptide combinatorial libraries and applications
IN Sharma, Shubh D., Plainsboro, NJ, UNITED STATES
Shi, Yiqun, East Brunswick, NJ, UNITED STATES
PI US 2002012948 A1 20020131
AI US 2001-883069 A1 20010614 (9)
PRAI WO 1999-US29743 19991214
US 1998-112235P 19981214 (60)
DT Utility
FS APPLICATION
LREP PEACOCK MYERS AND ADAMS P C, P O BOX 26927, ALBUQUERQUE, NM, 871256927
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 2093
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Metallopeptide combinatorial libraries and methods of making libraries and metallopeptides are provided, for use in biological, pharmaceutical and related applications. The combinatorial libraries are made of peptides, peptidomimetics and **peptide**-like constructs, and include a metal ion-binding region thereof which includes at least one orthogonal sulfur-protecting group, in which the **peptide**, peptidomimetic or construct is conformationally fixed on deprotection of the sulfur and complexation of the metal ion-binding region with a metal ion. Thereafter the library members may be screening to select those with the desired specificity and affinity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 38 OF 75 USPATFULL on STN
AN 2002:297570 USPATFULL
TI Ligands for metabotropic glutamate receptors and inhibitors of NAALAdase
IN Kozikowski, Alan P., Princeton, NJ, United States
Wroblewski, Jarda T., Kensington, MD, United States
Nan, Fajun, Washington, DC, United States
PA Georgetown University, Washington, DC, United States (U.S. corporation)
PI US 6479470 B1 20021112
AI US 2000-559978 20000427 (9)
PRAI US 2000-188031P 20000309 (60)
US 1999-166915P 19991122 (60)
US 1999-131627P 19990428 (60)

09567863

DT Utility
FS GRANTED
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Truong, Tamthom N.
LREP Gordon, Dana M., Foley Hoag LLP
CLMN Number of Claims: 67
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 15 Drawing Page(s)
LN.CNT 2741
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel compounds and formulations thereof which compounds are ligands, e.g., agonists or antagonists, for a metabotropic glutamate receptor or a NAALADase enzyme or both. The present invention also relates to methods of modulating the activity of a metabotropic glutamate receptor or a NAALADase enzyme or both, e.g., in a subject in need thereof, using a compound or formulation of the present invention. The present invention also relates to methods of treating a subject suffering from a chronic or acute disease, malady or condition due at least in part to an abnormality in the activity of an endogenous metabotropic glutamate receptor or a NAALADase enzyme or both, using a compound or formulation of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 39 OF 75 USPATFULL on STN
AN 2002:230966 USPATFULL
TI Peroxynitrite decomposition catalysts and methods of use thereof
IN Groves, John T., Princeton, NJ, United States
Moeller, Suzanne M., Princeton, NJ, United States
PA Trustees of Princeton University, Princeton, NJ, United States (U.S. corporation)
PI US 6448239 B1 20020910
AI US 2000-587382 20000601 (9)
PRAI US 1999-137308P 19990603 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Raymond, Richard L.
LREP Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, PC, Elrifi, Esq., Ivor R.
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1134
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides a novel class of substituted macrocyclic metallic complexes. The complexes are useful as peroxynitrite decomposition catalysts. Pharmaceutical compositions, and methods of making and using the compounds, or a pharmaceutically acceptable salt, hydrate, prodrug, or mixture thereof are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 40 OF 75 USPATFULL on STN
AN 2002:217091 USPATFULL
TI Combinatorial synthesis and screening of organometallic compounds and catalysts
IN Weinberg, W. Henry, Palo Alto, CA, United States
McFarland, Eric W., Santa Barbara, CA, United States
Goldwasser, Isy, Palo Alto, CA, United States
Boussie, Thomas, Menlo Park, CA, United States
Turner, Howard, Campbell, CA, United States
van Beek, Johannes A. M., Brussels, BELGIUM
Murphy, Vince, Cupertino, CA, United States

Powers, Tim, San Francisco, CA, United States
PA Symyx Technologies, Santa Clara, CA, United States (U.S. corporation)
PI US 6440745 B1 20020827
AI US 1999-337048 19990621 (9)
RLI Continuation-in-part of Ser. No. US 1998-127660, filed on 31 Jul 1998 Division of Ser. No. US 1994-327513, filed on 18 Oct 1994, now patented, Pat. No. US 5985356 Division of Ser. No. US 337048 Division of Ser. No. US 1997-898715, filed on 22 Jul 1997, now patented, Pat. No. US 6030917
PRAI US 1997-48987P 19970609 (60)
US 1997-35366P 19970110 (60)
US 1996-29255P 19961025 (60)
US 1996-28106P 19961009 (60)
US 1996-16102P 19960723 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Soderquist, Arlen
LREP Senniger, Powers, Leavitt & Roedel
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 34 Drawing Figure(s); 27 Drawing Page(s)
LN.CNT 3012
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates, inter alia, to methodologies for the synthesis, screening and characterization of organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention provide for the combinatorial synthesis, screening and characterization of libraries of supported and unsupported organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention can be applied to the preparation and screening of large numbers of organometallic compounds which can be used not only as catalysts (e.g., homogeneous catalysts), but also as additives and therapeutic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 41 OF 75 USPATFULL on STN
AN 2002:174756 USPATFULL
TI Combinatorial arrays of organometallic compounds and catalysts
IN Weinberg, W. Henry, Palo Alto, CA, United States
Goldwasser, Isy, Palo Alto, CA, United States
Boussie, Thomas, Menlo Park, CA, United States
Turner, Howard, Campbell, CA, United States
van Beek, Johannes A. M., Brussels, BELGIUM
Murphy, Vince, Cupertino, CA, United States
Powers, Tim, San Francisco, CA, United States
PA Symyx Technologies, Inc., Santa Clara, CA, United States (U.S. corporation)
PI US 6419881 B1 20020716
AI US 1999-337043 19990621 (9)
RLI Continuation-in-part of Ser. No. US 1998-127660, filed on 31 Jul 1998 Division of Ser. No. US 1994-327513, filed on 18 Oct 1994, now patented, Pat. No. US 5985356 Division of Ser. No. US 337043 Division of Ser. No. US 1997-898715, filed on 22 Jul 1997, now patented, Pat. No. US 6030917
PRAI US 1997-48987P 19970609 (60)
US 1997-35366P 19970110 (60)
US 1996-29255P 19961025 (60)
US 1996-28106P 19961009 (60)
US 1996-16102P 19960723 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Soderquist, Arlen
LREP Senniger, Powers, Leavitt & Roedel

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CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 34 Drawing Figure(s); 27 Drawing Page(s)
LN.CNT 3132
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates, inter alia, to methodologies for the synthesis, screening and characterization of organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention provide for the combinatorial synthesis, screening and characterization of libraries of supported and unsupported organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention can be applied to the preparation and screening of large numbers of organometallic compounds which can be used not only as catalysts (e.g., homogeneous catalysts), but also as additives and therapeutic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 42 OF 75 USPATFULL on STN
AN 2002:168216 USPATFULL
TI Amyloid binding nitrogen-linked compounds for the antemortem diagnosis of alzheimer's disease, in vivo imaging and prevention of amyloid deposits
IN Klunk, William E., Pittsburgh, PA, United States
Pettegrew, Jay W., Pittsburgh, PA, United States
Mathis, Jr., Chester A., Pittsburgh, PA, United States
PA University of Pittsburgh, Pittsburgh, PA, United States (U.S. corporation)
PI US 6417178 B1 20020709
AI US 1997-968902 19971106 (8)
RLI Continuation-in-part of Ser. No. US 1996-640704, filed on 1 May 1996, now abandoned Continuation-in-part of Ser. No. US 1995-432019, filed on 1 May 1995, now abandoned Continuation-in-part of Ser. No. US 1994-282289, filed on 29 Jul 1994, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Higel, Floyd D.
LREP Foley & Lardner
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 25 Drawing Figure(s); 15 Drawing Page(s)
LN.CNT 3302
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Amyloid binding compounds which are derivatives of Chrysamine G, pharmaceutical compositions containing, and methods using such compounds to identify Alzheimer's brain in vivo and to diagnose other pathological conditions characterized by amyloidosis, such as Down's Syndrome are described. Pharmaceutical compositions containing Chrysamine G and derivatives thereof and methods using such compositions to prevent cell degeneration and amyloid-induced toxicity in amyloidosis associated conditions are also described. Methods using Chrysamine G derivatives to stain or detect amyloid deposits in biopsy or post-mortem tissue are also described. Methods using Chrysamine G derivatives to quantify amyloid deposits in homogenates of biopsy and post-mortem tissue are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 43 OF 75 USPATFULL on STN
AN 2002:122801 USPATFULL
TI Diaryl ether condensation reactions
IN Marcoux, Jean-Francois, Westfield, NJ, United States

09567863

Doye, Sven, Hannover, GERMANY, FEDERAL REPUBLIC OF
Buchwald, Stephen, Newton, MA, United States
PA Massachusetts Institute of Technology, Cambridge, MA, United States (U.S. corporation)
PI US 6395939 B1 20020528
AI US 1998-166760 19981005 (9)
PRAI US 1997-61114P 19971006 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Keys, Rosalynd
LREP Gordon, Dana M., Foley, Hoag & Eliot LLP
CLMN Number of Claims: 64
ECL Exemplary Claim: 1,31
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 2640
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB One aspect of the present invention relates to novel reaction conditions that allow the efficient synthesis of diaryl ethers from arenes bearing a leaving group and arenols under relatively mild conditions. Another aspect of the present invention relates to the dramatic effects of acidic activators on Ullmann-type couplings involving electron-poor and/or relatively insoluble substrates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 44 OF 75 USPATFULL on STN
AN 2001:232346 USPATFULL
TI Methods and apparatus for **mass spectrometry**
IN Bateman, Robert Harold, Knutsford, Great Britain
Hoyes, John Brian, Stockport, Great Britain
PI US 2001052569 A1 20011220
US 6586727 B2 20030701
AI US 2001-796544 A1 20010302 (9)
PRAI GB 2000-14062 20000609
GB 2001-1048 20010115
DT Utility
FS APPLICATION
LREP DIEDERIKS & WHITELAW, PLC, 12471 Dillingham Square, #301, Woodbridge, VA, 22192
CLMN Number of Claims: 67
ECL Exemplary Claim: 1
DRWN 19 Drawing Page(s)
LN.CNT 1399
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An improved method of parent ion scanning is disclosed. In one embodiment a quadrupole mass filter 3 upstream of a collision cell 4 is arranged to operate in a highpass mode. Parent ions transmitted by the mass filter 3 are fragmented in the collision cell 4 and detected by an orthogonal time of flight analyser 5 which obtains a daughter ion mass spectrum. Ions having a mass to **charge** ratio below the cutoff of the mass filter 3 are identified as daughter ions, and candidate parent ions may then be discovered and their identity confirmed by obtaining corresponding daughter ion spectra. In a second embodiment, the collision cell 4 alternates between high and low fragmentation and candidate parent ions can additionally be identified on the basis of the loss of a predetermined ion or neutral particle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 45 OF 75 USPATFULL on STN
AN 2001:212546 USPATFULL
TI Imaging agents for diagnosis of Parkinson's disease

09567863

IN Babich, John W., North Scituate, MA, United States
Smith, Miles P., Belmont, MA, United States
PI US 2001044543 A1 20011122
US 6515131 B2 20030204
AI US 2001-790320 A1 20010222 (9)
PRAI US 2000-183996P 20000222 (60)
DT Utility
FS APPLICATION
LREP FOLEY, HOAG & ELIOT, LLP, PATENT GROUP, ONE POST OFFICE SQUARE, BOSTON, MA, 02109
CLMN Number of Claims: 164
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2656
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Generally, the present invention is directed to central nervous system dopamine transporter-imaging agents and methods of use thereof. In certain embodiments, the present invention relates to radiolabeled piperidine derivatives for use as imaging agents in the diagnosis of Parkinson's disease. Another aspect of the present invention relates to piperidine monoamine transporter ligands, comprising a **functional group** capable of chelating a radionuclide, e.g., technetium, and methods of use thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 46 OF 75 USPATFULL on STN
AN 2001:145299 USPATFULL
TI Pyrimidine derivatives
IN Cushing, Timothy D., Pacifica, CA, United States
Mellon, Heather L., Limerick, PA, United States
Jaen, Juan C., Burlingame, CA, United States
Flygare, John A., Burlingame, CA, United States
Miao, Shi-Chang, Foster City, CA, United States
Chen, Xiaoqi, San Mateo, CA, United States
Powers, Jay P., Pacifica, CA, United States
PA Tularik Inc. (U.S. corporation)
PI US 2001018436 A1 20010830
US 6528513 B2 20030304
AI US 2000-737983 A1 20001215 (9)
RLI Continuation of Ser. No. US 1999-249641, filed on 12 Feb 1999, GRANTED, Pat. No. US 6200977
PRAI US 1998-75005P 19980217 (60)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 78
ECL Exemplary Claim: 1
DRWN 18 Drawing Page(s)
LN.CNT 2036
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds and compositions are provided which are useful for the treatment of viral infections, particularly human Cytomegalovirus infection. The compounds include novel pyrimidine-based derivatives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 47 OF 75 USPATFULL on STN
AN 2001:231038 USPATFULL
TI Structurally determined cyclic metallo-constructs and applications
IN Sharma, Shubh D., Plainsboro, NJ, United States

09567863

PA Palatin Technologies, Inc., Princeton, NJ, United States (U.S. corporation)
PI US 6331285 B1 20011218
AI US 1999-464358 19991215 (9)
RLI Division of Ser. No. US 1996-660697, filed on 5 Jun 1996, now patented, Pat. No. US 6027711
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, Dameron L.
LREP Slusher, Stephen A.Peacock, Myers & Adams
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 20 Drawing Figure(s); 14 Drawing Page(s)
LN.CNT 4839
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A metallo-construct, which may be a **peptide**, is provided for use as a biological, therapeutic, diagnostic imaging, or radiotherapeutic agent, and for use in library or combinatorial chemistry methods. The construct has a conformationally constrained global secondary structure obtained upon complexing with a metal ion. The **peptide** constructs are of the general formula:

R.sub.1 --X--R.sub.2

where X is a plurality of amino **acids** and includes a complexing backbone for complexing metal ions, so that substantially all of the valences of the metal ion are satisfied upon complexation of the metal ion with X, resulting in a specific regional secondary structure forming a part of the global secondary structure; and where R.sub.1 and R.sub.2 each include from 0 to about 20 amino **acids**, the amino **acids** being selected so that upon complexing the metal ion with X at least a portion of either R.sub.1 or R.sub.2 or both have a structure forming the balance of the conformationally constrained global secondary structure. All or a portion of the global secondary structure, which may be sychnologic or rhegnylogic, may form a ligand or mimic a known biological-function domain. The construct has substantially higher affinity for its target upon labeling with a metal ion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 48 OF 75 USPATFULL on STN
AN 2001:226655 USPATFULL
TI Formamide compounds as therapeutic agents
IN Andrews, Robert Carl, Durham, NC, United States
Andersen, Marc Werner, Raleigh, NC, United States
Bubacz, Dulce Garrido, Cary, NC, United States
Chan, Joseph Howing, Chapel Hill, NC, United States
Cowan, David John, Hillsborough, NC, United States
Gaul, Michael David, Apex, NC, United States
McDougald, Daryl Lynn, Durham, NC, United States
Musso, David Lee, Raleigh, NC, United States
Rabinowitz, Michael Howard, Durham, NC, United States
Stanford, Jennifer Badiang, Cary, NC, United States
Wiethe, Robert William, Durham, NC, United States
PA Glaxo Wellcome Inc., Research Triangle Park, NC, United States (U.S. corporation)
PI US 6329400 B1 20011211
AI US 1999-382924 19990825 (9)
PRAI GB 1998-18608 19980826
US 1998-97958P 19980826 (60)
DT Utility
FS GRANTED

09567863

EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Rao, Deepak R.
LREP Lemanowicz, John L.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3877
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A family of compounds having the general structural formula ##STR1##

where W is a reverse hydroxamic **acid** group, and R.sub.1, R.sub.2, R.sub.3, R.sub.4, R.sub.5 and R.sub.6 are as described in the specification, or a pharmaceutically acceptable salt, solvate, biohydrolyzable ester, biohydrolyzable amide, affinity reagent, or prodrug thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 49 OF 75 USPATFULL on STN
AN 2001:220862 USPATFULL
TI Aldol condensations by catalytic antibodies
IN Barbas, Carlos F., Del Mar, CA, United States
Lerner, Richard A., La Jolla, CA, United States
Zhong, Guofu, San Diego, CA, United States
List, Benjamin, San Diego, CA, United States
PA The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)
PI US 6326176 B1 20011204
AI US 2000-573753 20000518 (9)
RLI Continuation-in-part of Ser. No. WO 1998-US26942, filed on 18 Dec 1998
DT Utility
FS GRANTED
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP Northrup, Thomas E.
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 51 Drawing Figure(s); 45 Drawing Page(s)
LN.CNT 2770
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Catalytic antibodies, including 38C2 and 33F12, are capable of efficiently catalyzing a wide variety of ketone-ketone, ketone-aldehyde, aldehyde-ketone, and aldehyde-aldehyde intermolecular aldol reactions, and in some cases to catalyze their subsequent dehydration to yield aldol condensation products. A number of intramolecular aldol reactions have also been defined. Catalysis of all intramolecular aldol reactions examined yields the corresponding condensation products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 50 OF 75 USPATFULL on STN
AN 2001:190719 USPATFULL
TI Amphiphilic drug-oligomer conjugates with hydroyzable lipophile components and methods for making and using the same
IN Ekwuribe, Nnochiri, Cary, NC, United States
Ramaswamy, Muthukumar, Cary, NC, United States
Rajagopalan, Jayanthi Sethuraman, Cary, NC, United States
PA Nobex Corporation, Research Triangle Park, NC, United States (U.S. corporation)
PI US 6309633 B1 20011030
AI US 1999-336548 19990619 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Russel, Jeffrey E.

09567863

LREP Myers Bigel Sibley & Sajovec, P.A.
CLMN Number of Claims: 60
ECL Exemplary Claim: 49
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 2044
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a drug-oligomer conjugate having the following general formula: ##STR1##

wherein D is a therapeutic drug moiety; H and H' are each a hydrophilic moiety, independently selected from the group consisting of straight or branched PEG polymers having from 2 to 130 PEG subunits, and sugars; L is a lipophilic moiety selected from the group consisting of alkyl groups having 2-26 carbon atoms, cholesterol, adamantane and fatty acids; o is a number from 1 to the maximum number of covalent bonding sites on H; m+n+p together have a value of at least one and not exceeding the total number of covalent bonding sites on D for the --H', --L and --H--L substituents; the H--L bond(s) are hydrolyzable and the D--L' bond(s), when present, are hydrolyzable; the conjugate being further characterized by one of the following: (i) m is 0 and p is at least 1; (ii) n is 0 and p is at least 1; (iii) m and n are each 0 and p is at least 1; (iv) p is 0 and m and n are each at least 1. The therapeutic drug moiety is preferably a therapeutic **protein** or peptide, preferably insulin or a functional equivalent thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 51 OF 75 USPATFULL on STN
AN 2001:125810 USPATFULL
TI Method and product for the sequence determination of peptides using a mass spectrometer
IN Chait, Brian T., New York, NY, United States
Beavis, Ronald, Winnipeg, Canada
Wang, Rong, New York, NY, United States
Kent, Stephen B. H., San Francisco, CA, United States
PA The Rockefeller University, NY, United States (U.S. corporation)
The Scripps Research Institute, La Jolla, United States (U.S. corporation)
PI US 6271037 B1 20010807
WO 9324834 19931209
AI US 1996-341555 19960624 (8)
WO 1993-US5070 19930527
19960124 PCT 371 date
19960124 PCT 102(e) date
RLI Continuation-in-part of Ser. No. US 1992-891177, filed on 29 May 1992, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, Dwayne C.; Assistant Examiner: Delacroix-Muirheid, C.
LREP Townsend and Townsend and Crew LLP
CLMN Number of Claims: 45
ECL Exemplary Claim: 1
DRWN 18 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 1336
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Method is described for sequencing polypeptides by forming peptide ladders comprising a series of polypeptides in which adjacent members of the series vary by one amino **acid** residue and determining the identity and position of each amino **acid** in the polypeptide by mass spectroscopy.

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 52 OF 75 USPATFULL on STN
AN 2001:93307 USPATFULL
TI Combinatorial synthesis and analysis of organometallic compounds and homogeneous catalysts
IN Weinberg, W. Henry, Woodside, CA, United States
McFarland, Eric, San Jose, CA, United States
Goldwasser, Isy, Menlo Park, CA, United States
Boussie, Thomas, Menlo Park, CA, United States
Turner, Howard, Campbell, CA, United States
Van Beek, Johannes A. M., Mountain View, CA, United States
Murphy, Vince, Cupertino, CA, United States
Powers, Timothy, San Francisco, CA, United States
PA Symyx Technologies, Inc., Santa Clara, CA, United States (U.S. corporation)
PI US 6248540 B1 20010619
AI US 1999-390001 19990903 (9)
RLI Continuation of Ser. No. US 1997-898715, filed on 22 Jul 1997, now patented, Pat. No. US 6030917
PRAI US 1997-35366P 19970110 (60)
US 1996-29255P 19961025 (60)
US 1996-28106P 19961009 (60)
US 1996-16102P 19960723 (60)
US 1997-50949P 19970611 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Celsa, Bennett
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 34 Drawing Figure(s); 27 Drawing Page(s)
LN.CNT 3008
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates, inter alia, to methodologies for the synthesis, screening and characterization of organometailic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention provide for the combinatorial synthesis, screening and characterization of libraries of supported and unsupported organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention can be applied to the preparation and screening of large niumbers of organometallic compounds which can be used not only as catalysts (e.g., homogeneous catalysts), but also as additives and therapeutic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 53 OF 75 USPATFULL on STN
AN 2001:36824 USPATFULL
TI Pyrimidine derivatives
IN Cushing, Timothy D., Pacifica, CA, United States
Mellon, Heather L., Limerick, CA, United States
Jaen, Juan C., Burlingame, CA, United States
Flygare, John A., Burlingame, CA, United States
Miao, Shi-Chang, Foster City, CA, United States
Chen, Xiaoqi, San Mateo, CA, United States
Powers, Jay P., Pacifica, CA, United States
PA Tularik Inc., South San Francisco, CA, United States (U.S. corporation)
PI US 6200977 B1 20010313
AI US 1999-249641 19990212 (9)
DT Utility
FS Granted
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Patel, Sudhaker

B.
LREP Townsend and Townsend and Crew LLP
CLMN Number of Claims: 84
ECL Exemplary Claim: 1
DRWN 28 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 1948
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds and compositions are provided which are useful for the treatment of viral infections, particularly human Cytomegalovirus infection. The compounds include novel pyrimidine-based derivatives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 54 OF 75 USPATFULL on STN
AN 2001:25915 USPATFULL
TI Formamide compounds as therapeutic agents
IN Andrews, Robert Carl, Durham, NC, United States
Andersen, Marc Werner, Raleigh, NC, United States
Bubacz, Dulce Garrido, Cary, NC, United States
Chan, Joseph Howing, Chapel Hill, NC, United States
Cowan, David John, Hillsborough, NC, United States
Gaul, Michael David, Apex, NC, United States
McDougald, Daryl Lynn, Durham, NC, United States
Musso, David Lee, Raleigh, NC, United States
Rabinowitz, Michael Howard, Durham, NC, United States
Stanford, Jennifer Badiang, Cary, NC, United States
Wiethe, Robert William, Durham, NC, United States
PA Glaxo Wellcome Inc., Research Triangle Park, NC, United States (U.S. corporation)
PI US 6191150 B1 20010220
AI US 1999-382747 19990825 (9)
PRAI GB 1998-18605 19980826
US 1998-97959P 19980826 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Davis, Zinna Northington; Assistant Examiner: Robinson, Binta
LREP Lemanowicz, John L.
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2829
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A family of compounds having the general structural formula ##STR1##

where W is a reverse hydroxamic acid group, and R.sub.1, R.sub.2, R.sub.3, R.sub.4, R.sub.5 and R.sub.6 are as described in the specification, or a pharmaceutically acceptable salt, solvate, biohydrolyzable ester, biohydrolyzable amide, affinity reagent, or prodrug thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 55 OF 75 USPATFULL on STN
AN 2001:4738 USPATFULL
TI Formamides as therapeutic agents
IN Andrews, Robert Carl, Durham, NC, United States
Andersen, Marc Werner, Raleigh, NC, United States
Cowan, David John, Hillsborough, NC, United States
Deaton, David Norman, Cary, NC, United States
Dickerson, Scott Howard, Chapel Hill, NC, United States
Drewry, David Harold, Durham, NC, United States

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Gaul, Michael David, Apex, NC, United States
Luzzio, Michael Joseph, Durham, NC, United States
Marron, Brian Edward, Durham, NC, United States
Rabinowitz, Michael Howard, Durham, NC, United States
PA Glaxo Wellcome Inc., Research Triangle Park, NC, United States (U.S. corporation)
PI US 6172064 B1 20010109
AI US 1999-382333 19990825 (9)
PRAI US 1998-97956P 19980826 (60)
DT Patent
FS Granted
EXNAM Primary Examiner: Lambkin, Deborah C.
LREP Lemanowicz, John L.
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3155
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A family of compounds having the general structural formula ##STR1##

where W is a reverse hydroxamic **acid** group, and R.sub.1, R.sub.2, R.sub.3, R.sub.4, R.sub.5 and R.sub.6 are as described in the specification, or a pharmaceutically acceptable salt, solvate, biohydrolyzable ester, biohydrolyzable amide, affinity reagent, or prodrug thereof. Also described are methods for their preparation, pharmaceutical compositions including such compounds and their use in medicine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 56 OF 75 USPATFULL on STN
AN 2000:150349 USPATFULL
TI Selectively N-alkylated peptidomimetic combinatorial libraries and compounds therein
IN Dorner, Barbara, Basel, Switzerland
Ostresh, John M., Encinitas, CA, United States
Dooley, Colette T., San Diego, CA, United States
Houghten, Richard A., Del Mar, CA, United States
Eichler, Jutta, Cardiff, CA, United States
PA Trega Biosciences, Inc., San Diego, CA, United States (U.S. corporation)
PI US 6143932 20001107
AI US 1999-346005 19990701 (9)
RLI Continuation of Ser. No. US 1997-811830, filed on 5 Mar 1997
PRAI US 1996-46871P 19960305 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Kumar, Shailendra
LREP Campbell & Flores LLP
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2639
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The instant invention is directed to a single, selectively N-alkylated compound and libraries of such compounds as set forth in Formula I. Furthermore, the instant invention is directed to methods of effecting analgesia, a decrease in the postprandial rise in the blood glucose levels of a mammal after ingestion of a carbohydrate load by said mammal, and treating microbial infections, utilizing such a single compound of Formula I in conjunction with a pharmaceutically-acceptable carrier. Also, the instant invention is directed to methods for selective alkylation, positional scanning and iterative synthetic and

screening technologies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 57 OF 75 USPATFULL on STN
AN 2000:125265 USPATFULL
TI Selectively N-alkylated peptidomimetic combinatorial libraries and compounds therein
IN Dorner, Barbara, Basel, Switzerland
Ostresh, John M., Encinitas, CA, United States
Dooley, Colette T., San Diego, CA, United States
Houghten, Richard A., Del Mar, CA, United States
Eichler, Jutta, Cardiff, CA, United States
PA Trega Biosciences, Inc., San Diego, CA, United States (U.S. corporation)
PI US 6121489 20000919
AI US 1997-811830 19970305 (8)
PRAI US 1996-46871P 19960305 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Kumar, Shailendra
LREP Campbell & Flores LLP
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2664
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The instant invention is directed to a single, selectively N-alkylated compound and libraries of such compounds as set forth in Formula I. Furthermore, the instant invention is directed to methods of effecting analgesia, a decrease in the postprandial rise in the blood glucose levels of a mammal after ingestion of a carbohydrate load by said mammal, and treating microbial infections, utilizing such a single compound of Formula I in conjunction with a pharmaceutically-acceptable carrier. Also, the instant invention is directed to methods for selective alkylation, positional scanning and iterative synthetic and screening technologies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 58 OF 75 USPATFULL on STN
AN 2000:77466 USPATFULL
TI Glycosylhydrazines preparation immobilization and reactions of glycoprotein analysis and O-glycan removal
IN Redmond, John William, 39 Stockdale Street, Dickson, ACT 2602, Australia
Packer, Nicolle Hannah, 9 Yarabah Avenue, Gordon, NSW 2072, Australia
Gooley, Andrew Arthur, 14 Vimiera Road, Eastwood, NSW 2122, Australia
Williams, Keith Leslie, 23 Nandi Avenue, Frenchs Forest, NSW 2086, Australia
Batley, Michael, 2 Calool Road, Beecroft, NSW 2119, Australia
Kett, Warren Charles, 10/3 Trafalgar Place, Marsfield, NSW 2122, Australia
Pisano, Anthony, 39 Robertson Road, Chesterhill, NSW 2162, Australia
Tweeddale, Helen Joan, 26 Burraneer Avenue, St. Ives, NSW 2075, Australia
Cooper, Catherine Anne, 23 Lord Street, Mount Colah, NSW 2079, Australia
PI US 6077951 20000620
AI US 1998-185406 19981103 (9)
RLI Continuation of Ser. No. US 656277
PRAI AU 1993-2890 19931209
AU 1994-8328 19940921
DT Utility
FS Granted

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EXNAM Primary Examiner: Lee, Howard C.
LREP Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 48 Drawing Figure(s); 35 Drawing Page(s)
LN.CNT 1949
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention consists in methods of preparing derivatives either isolation or from glycopeptides or glycoproteins. The methods comprise producing sugar hydrazones, sugar pyrazoles, glycosylpyrazones, azoglycan dyes and hydrazoglycan dyes. The present invention also relates to the removal of O-glycans from glycopeptides or glycoproteins, immobilising reducing sugars onto solid supports and methods to obtain sugars from glycopeptide or glycoprotein comprising subjecting the glycopeptide or glycoprotein to solid-phase Edman degradation followed by separating and characterizing the sugars.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 59 OF 75 USPATFULL on STN
AN 2000:28107 USPATFULL
TI .beta.-sheet nucleating peptidomimetics
IN Kelly, Jeffery W., 213 Chimney Hill Cir., College Station, TX, United States 77840
PI US 6034211 20000307
AI US 1996-664379 19960614 (8)
PRAI US 1996-18925P 19960603 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Huff, Sheela
LREP Fish & Richardson P.C.
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1635
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB N-methylated .beta.-sheet nucleating peptidomimetics containing diarylheterocycle .beta.-turn mimics, and methods of making and using them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 60 OF 75 USPATFULL on STN
AN 2000:24591 USPATFULL
TI Combinatorial synthesis and analysis of organometallic compounds and catalysts
IN Weinberg, W. Henry, Woodside, CA, United States
McFarland, Eric, San Jose, CA, United States
Goldwasser, Isy, Menlo Park, CA, United States
Boussie, Thomas, Menlo Park, CA, United States
Turner, Howard, Campbell, CA, United States
Van Beek, Johannes A. M., Mountain View, CA, United States
Murphy, Vince, Cupertino, CA, United States
Powers, Timothy, San Francisco, CA, United States
PA Symyx Technologies, Inc., Santa Clara, CA, United States (U.S. corporation)
PI US 6030917 20000229
AI US 1997-898715 19970722 (8)
PRAI US 1997-48987P 19970609 (60)
US 1997-35366P 19970110 (60)
US 1996-29255P 19961025 (60)
US 1996-28106P 19961009 (60)

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US 1996-16102P 19960723 (60)
US 1997-50949P 19970611 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Adams, Donald E.; Assistant Examiner: Ricigliano, Joseph W.
CLMN Number of Claims: 69
ECL Exemplary Claim: 1
DRWN 34 Drawing Figure(s); 27 Drawing Page(s)
LN.CNT 3193
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates, inter alia, to methodologies for the synthesis, screening and characterization of organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention provide for the combinatorial synthesis, screening and characterization of libraries of supported and unsupported organometallic compounds and catalysts (e.g., homogeneous catalysts). The methods of the present invention can be applied to the preparation and screening of large numbers of organometallic compounds which can be used not only as catalysts (e.g., homogeneous catalysts), but also as additives and therapeutic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 61 OF 75 USPATFULL on STN
AN 2000:21206 USPATFULL
TI Structurally determined metallo-constructs and applications
IN Sharma, Shubh D., Albuquerque, NM, United States
PA RhoMed Incorporated, Edison, NJ, United States (U.S. corporation)
PI US 6027711 20000222
AI US 1996-660697 19960605 (8)
RLI Continuation-in-part of Ser. No. US 1995-476652, filed on 7 Jun 1995, now patented, Pat. No. US 5891418, issued on 6 Apr 1999
DT Utility
FS Granted
EXNAM Primary Examiner: Dees, Jose G.; Assistant Examiner: Jones, Dameron
LREP Slusher, Stephen A., Todaro, John C., Peacock, Deborah A.
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 20 Drawing Figure(s); 14 Drawing Page(s)
LN.CNT 4915
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A metallo-construct, which may be a **peptide**, is provided for use as a biological, therapeutic, diagnostic imaging, or radiotherapeutic agent, and for use in library or combinatorial chemistry methods. The construct has a conformationally constrained global secondary structure obtained upon complexing with a metal ion. The **peptide** constructs are of the general formula:

R.sub.1 --X--R.sub.2

where X is a plurality of amino **acids** and includes a complexing backbone for complexing metal ions, so that substantially all of the valences of the metal ion are satisfied upon complexation of the metal ion with X, resulting in a specific regional secondary structure forming a part of the global secondary structure; and where R.sub.1 and R.sub.2 each include from 0 to about 20 amino **acids**, the amino **acids** being selected so that upon complexing the metal ion with X at least a portion of either R.sub.1 or R.sub.2 or both have a structure forming the balance of the conformationally constrained global secondary structure. All or a portion of the global secondary structure, which may be sychnologic or rhegnylogic, may form a ligand or mimic a

known biological-function domain. The construct has substantially higher affinity for its target upon labeling with a metal ion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 62 OF 75 USPATFULL on STN
AN 1999:92778 USPATFULL
TI CS-1 peptidomimetics, compositions and methods of using the same
IN Arrhenius, Thomas S., San Diego, CA, United States
Elices, Mariano J., San Diego, CA, United States
Gaeta, Federico C. A., Olivenhain, CA, United States
PA Cytel Corporation, San Diego, CA, United States (U.S. corporation)
PI US 5936065 19990810
AI US 1995-462424 19950605 (8)
RLI Continuation-in-part of Ser. No. US 1994-349024, filed on 2 Dec 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-164101, filed on 6 Dec 1993, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Tsang, Cecilia J.; Assistant Examiner: Lukton, David
LREP Campbell & Flores LLP
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 3625
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention contemplates a compound defined by the following formula: ##STR1## that inhibits the binding between the VLA-4 and the fibronectin CS-1 compound. Pharmaceutical compositions containing a contemplated compound and methods for treating immunoinflammatory conditions using the compound are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 63 OF 75 USPATFULL on STN
AN 1998:157466 USPATFULL
TI Peptides for altering bone resorption, angiogenesis and restenosis
IN Cheng, Soan, San Diego, CA, United States
Ingram, Ronald, Oceanside, CA, United States
Mullen, Daniel, San Diego, CA, United States
Tschopp, Juerg F., San Diego, CA, United States
PA La Jolla Cancer Research Foundation, San Diego, CA, United States (U.S. corporation)
PI US 5849865 19981215
AI US 1995-421695 19950412 (8)
RLI Continuation-in-part of Ser. No. US 1994-303052, filed on 8 Sep 1994 which is a continuation-in-part of Ser. No. US 1994-227316, filed on 13 Apr 1994, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Russel, Jeffrey E.
LREP Campbell & Flores LLP
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 23 Drawing Figure(s); 19 Drawing Page(s)
LN.CNT 3379
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides Arg-Gly-Asp peptides that can alter the binding of osteoclasts to a matrix such as bone or can selectively alter integrin receptor binding. The invention also provides methods of using the Arg-Gly-Asp peptides to alter .alpha..sub.v .beta..sub.3 integrin receptor-mediated binding of a cell such as an osteoclast, endothelial

cell or smooth muscle cell to a matrix. The invention further provides methods for ameliorating the severity of a pathology characterized, in part, by an undesirable level of bone resorption, angiogenesis or restenosis in a subject.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 64 OF 75 USPATFULL on STN
AN 1998:135218 USPATFULL
TI Glycosylhydrazines, preparation, immobilization and reactions of: glycoprotein analysis and O-glycan removal
IN Redmond, John William, 39 Stockdale Street, Dickson, ACT 2602, Australia
Packer, Nicolle Hannah, 9 Yarabah Avenue, Gordon, NSW 2072, Australia
Gooley, Andrew Arthur, 14 Vimiera Road, Eastwood, NSW 2122, Australia
Williams, Keith Leslie, 23 Nandi Avenue, Frenchs Forest, NSW 2086, Australia
Batley, Michael, 2 Calool Road, Beecroft, NSW 2119, Australia
Kerr, Warren Charles, 10/3 Trafalgar Place, Marsfield, NSW 2122, Australia
Pisano, Anthony, 39 Robertson Road, Chesterhill, NSW 2162, Australia
Tweeddale, Helen Joan, 26 Burraneer Avenue, St. Ives, NSW 2075, Australia
Cooper, Catherine Anne, 23 Lord Street, Mount Colah, NSW 2079, Australia
PI US 5831077 19981103
WO 9515969 19950615
AI US 1996-656277 19960923 (8)
WO 1994-AU764 19941209
19960923 PCT 371 date
19960923 PCT 102(e) date
PRAI AU 1993-2890 19931209
AU 1994-8328 19940921
DT Utility
FS Granted
EXNAM Primary Examiner: Knode, Marian C.; Assistant Examiner: Lee, Howard C.
LREP Fish & Richardson PC
CLMN Number of Claims: 45
ECL Exemplary Claim: 1
DRWN 48 Drawing Figure(s); 35 Drawing Page(s)
LN.CNT 2060
AB The present invention consists in methods of preparing sugar derivatives either in isolation or from glycopeptides or glycoproteins. The methods comprise producing sugar hydrazones, sugar pyrazoles, glycosylpyrazones, azoglycan dyes and hydrazoglycan dyes. The present invention also relates to the removal of O-glycans from glycopeptides or glycoproteins, immobilizing reducing sugars onto solid supports and methods to obtain sugars from a glycopeptide or glycoprotein comprising subjecting the glycopeptide or glycoprotein to solid phase Edman degradation followed by separating and characterizing the sugars.

L41 ANSWER 65 OF 75 USPATFULL on STN
AN 1998:124555 USPATFULL
TI CS-1 peptidomimetics, compositions and methods of using same
IN Arrhenius, Thomas S., San Diego, CA, United States
Elices, Mariano J., San Diego, CA, United States
Gaeta, Federico C. A., Olivenhain, CA, United States
PA Cytel Corporation, San Diego, CA, United States (U.S. corporation)
PI US 5821231 19981013
AI US 1995-461056 19950605 (8)
RLI Continuation-in-part of Ser. No. US 1994-349024, filed on 2 Dec 1994 which is a continuation-in-part of Ser. No. US 1993-164101, filed on 6 Dec 1993, now abandoned

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DT Utility
FS Granted
EXNAM Primary Examiner: Tsang, Cecilia J.; Assistant Examiner: Gupta, Anish
LREP Campbell & Flores LLP
CLMN Number of Claims: 25
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 3766
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention contemplates a compound defined by the following formula: ##STR1## that inhibits the binding between the VLA-4 and the fibronectin CS-1 compound. Pharmaceutical compositions containing a contemplated compound and methods for treating immunoinflammatory conditions using the compound are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 66 OF 75 USPATFULL on STN
AN 1998:112368 USPATFULL
TI Method and apparatus for imaging biological samples with MALDI MS
IN Caprioli, Richard M., Houston, TX, United States
PA Board of Regents, The University of Texas System, Austin, TX, United States (U.S. corporation)
PI US 5808300 19980915
AI US 1997-854040 19970509 (8)
PRAI US 1996-17241P 19960510 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Nguyen, Kiet T.
LREP Browning Bushman
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 47 Drawing Figure(s); 44 Drawing Page(s)
LN.CNT 1597
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB MALDI MS has been used to generate images of samples in one or more m/z pictures, providing the capability of mapping concentrations of specific molecules in X,Y coordinates of the original sample. For sections of mammalian tissue, for example, this can be accomplished in two ways. First, tissue slices can be directly analyzed after thorough drying and application of a thin coating of matrix by electrospray. Second, imprints of the tissue can be analyzed by blotting the dry tissue sections on specially prepared targets, e.g., C-18 (10 .mu.m dia.) beads. Peptides and small proteins bind to the C-18 and create a positive imprint of the tissue which can be imaged by MALDI MS after application of matrix. Such images can be displayed in individual m/z values as a selected ion image which would localize individual compounds in the tissue, as summed ion images, or as a total ion image which would be analogous to a photomicrograph. This imaging process may also be applied to separation techniques where a physical track or other X,Y deposition process is utilized, for example, in the CE/MALDI MS combination where a track is deposited on a membrane target.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 67 OF 75 USPATFULL on STN
AN 1998:111900 USPATFULL
TI Peptides useful for altering bone resorption
IN Cheng, Soan, San Diego, CA, United States
Ingram, Ronald, Oceanside, CA, United States
Mullen, Daniel, San Diego, CA, United States
Tschopp, Juerg F., San Diego, CA, United States

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PA La Jolla Cancer Research Center, La Jolla, CA, United States (U.S. corporation)
PI US 5807819 19980915
AI US 1995-421698 19950412 (8)
RLI Continuation-in-part of Ser. No. US 1994-303052, filed on 8 Sep 1994 which is a continuation-in-part of Ser. No. US 1994-227316, filed on 15 Apr 1994, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Russel, Jeffrey E.
LREP Campbell & Flores LLP
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 23 Drawing Figure(s); 19 Drawing Page(s)
LN.CNT 3235
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides Arg--Gly--Asp peptides that can alter the binding of osteoclasts to a matrix such as bone or can selectively alter integrin receptor binding. The invention also provides methods of using the Arg--Gly--Asp peptides to alter .alpha..sub.V .beta..sub.3 integrin receptor-mediated binding of a cell such as an osteoclast, endothelial cell or smooth muscle cell to a matrix. The invention further provides methods for ameliorating the severity of a pathology characterized, in part, by an undesirable level of bone resorption, angiogenesis or restenosis in a subject.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 68 OF 75 USPATFULL on STN
AN 1998:95518 USPATFULL
TI Use of peptides for altering bone resorption
IN Cheng, Soan, San Diego, CA, United States
Ingram, Ronald, Oceanside, CA, United States
Mullen, Daniel, San Diego, CA, United States
Tschopp, Juerg F., San Diego, CA, United States
PA La Jolla Cancer Research Center, La Jolla, CA, United States (U.S. corporation)
PI US 5792745 19980811
AI US 1995-421697 19950412 (8)
RLI Continuation-in-part of Ser. No. US 1994-303052, filed on 8 Sep 1994 which is a continuation-in-part of Ser. No. US 1994-227316, filed on 13 Apr 1994, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Russel, Jeffrey E.
LREP Campbell & Flores LLP
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 23 Drawing Figure(s); 19 Drawing Page(s)
LN.CNT 3298
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides Arg-Gly-Asp peptides that can alter the binding of osteoclasts to a matrix such as bone or can selectively alter integrin receptor binding. The invention also provides methods of using the Arg-Gly-Asp peptides to alter .alpha..sub.v .beta..sub.3 integrin receptor-mediated binding of a cell such as an osteoclast, endothelial cell or smooth muscle cell to a matrix. The invention further provides methods for ameliorating the severity of a pathology characterized, in part, by an undesirable level of bone resorption, angiogenesis or restenosis in a subject.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 69 OF 75 USPATFULL on STN
AN 1998:75558 USPATFULL
TI Use of peptides for altering .alpha..sub.V .beta..sub.3 -mediated binding
IN Cheng, Soan, San Diego, CA, United States
Ingram, Ronald, Oceanside, CA, United States
Mullen, Daniel, San Diego, CA, United States
Tschopp, Juerg F., San Diego, CA, United States
PA La Jolla Cancer Research Center, La Jolla, CA, United States (U.S. corporation)
PI US 5773412 19980630
AI US 1995-421696 19950412 (8)
DCD 20150412
RLI Continuation-in-part of Ser. No. US 1994-303052, filed on 8 Sep 1994 which is a continuation-in-part of Ser. No. US 1994-227316, filed on 13 Apr 1994, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Russel, Jeffrey E.
LREP Campbell & Flores LLP
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 23 Drawing Figure(s); 19 Drawing Page(s)
LN.CNT 2586
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides Arg--Gly--Asp peptides that can alter the binding of osteoclasts to a matrix such as bone or can selectively alter integrin receptor binding. The invention also provides methods of using the Arg--Gly--Asp peptides to alter .alpha..sub.v .beta..sub.3 integrin receptor-mediated binding of a cell such as an osteoclast, endothelial cell or smooth muscle cell to a matrix. The invention further provides methods for ameliorating the severity of a pathology characterized, in part, by an undesirable level of bone resorption, angiogenesis or restenosis in a subject.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 70 OF 75 USPATFULL on STN
AN 1998:72598 USPATFULL
TI CS-1 peptidomimetics, compositions and methods of using the same
IN Arrhenius, Thomas S., San Diego, CA, United States
Elices, Mariano J., San Diego, CA, United States
Gaeta, Federico C.A., Olivenhain, CA, United States
PA Cytel Corporation, San Diego, CA, United States (U.S. corporation)
PI US 5770573 19980623
AI US 1995-462219 19950605 (8)
RLI Continuation-in-part of Ser. No. US 1994-349024, filed on 2 Dec 1994 which is a continuation-in-part of Ser. No. US 1993-164101, filed on 6 Dec 1993, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Tsang, Cecilia J.; Assistant Examiner: Gupta, Anish
LREP Campbell & Flores LLP
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 3926
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention contemplates a compound defined by the following formula: ##STR1## that inhibits the binding between the VLA-4 and the fibronectin CS-1 compound. Pharmaceutical compositions containing a

contemplated compound and methods for treating immunoinflammatory conditions using the compound are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 71 OF 75 USPATFULL on STN
AN 1998:72591 USPATFULL
TI Peptides for reducing or inhibiting bone resorption
IN Cheng, Soan, San Diego, CA, United States
Ingram, Ronald, Oceanside, CA, United States
Mullen, Daniel, San Diego, CA, United States
Tschopp, Juerg, San Diego, CA, United States
PA La Jolla Cancer Research Center, La Jolla, CA, United States (U.S. corporation)
PI US 5770565 19980623
AI US 1994-303052 19940908 (8)
RLI Continuation-in-part of Ser. No. US 1994-227316, filed on 13 Apr 1994, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Russel, Jeffrey E.
LREP Campbell & Flores LLP
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 21 Drawing Figure(s); 17 Drawing Page(s)
LN.CNT 2392
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides Arg-Gly-Asp peptides that can reduce or inhibit the binding of osteoclasts to a matrix such as bone or can selectively alter integrin receptor binding. The invention also provides methods of using the Arg-Gly-Asp peptides to reduce or inhibit osteoclast binding to a matrix, to reduce or inhibit bone resorption in a subject and to alter .alpha..sub.V .beta..sub.3 binding.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 72 OF 75 USPATFULL on STN
AN 1998:61612 USPATFULL
TI Peptides useful for altering .alpha..sub.v .beta..sub.3 -mediated binding
IN Cheng, Soan, San Diego, CA, United States
Ingram, Ronald, Oceanside, CA, United States
Mullen, Daniel, San Diego, CA, United States
Tschopp, Juerg F., San Diego, CA, United States
PA La Jolla Cancer Research Center, La Jolla, CA, United States (U.S. corporation)
PI US 5759996 19980602
AI US 1995-421702 19950412 (8)
RLI Continuation-in-part of Ser. No. US 1994-303052, filed on 8 Sep 1994 which is a continuation-in-part of Ser. No. US 1994-227316, filed on 13 Apr 1994, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Russel, Jeffrey E.
LREP Campbell & Flores LLP
CLMN Number of Claims: 42
ECL Exemplary Claim: 1
DRWN 23 Drawing Figure(s); 19 Drawing Page(s)
LN.CNT 2699
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides Arg-Gly-Asp peptides that can alter the binding of osteoclasts to a matrix such as bone or can selectively alter

integrin receptor binding. The invention also provides methods of using the Arg-Gly-Asp peptides to alter .alpha..sub.v .beta..sub.3 integrin receptor-mediated binding of a cell such as an osteoclast, endothelial cell or smooth muscle cell to a matrix. The invention further provides methods for ameliorating the severity of a pathology characterized, in part, by an undesirable level of bone resorption, angiogenesis or restenosis in a subject.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 73 OF 75 USPATFULL on STN
AN 97:36154 USPATFULL
TI Brain-enhanced delivery of neuroactive peptides by sequential metabolism
IN Bodor, Nicholas S., Gainesville, FL, United States
PA University of Florida, Gainesville, FL, United States (U.S. corporation)
PI US 5624894 19970429
AI US 1995-428488 19950427 (8)
RLI Continuation of Ser. No. US 1992-946062, filed on 17 Sep 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Lukton, David
LREP Burns, Doane, Swecker & Mathis, L.L.P.
CLMN Number of Claims: 67
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 4149
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel **peptide** derivatives which are designed to deliver pharmacologically active peptides into the central nervous system by sequential metabolism. The **peptide** is placed in a molecular environment which disguises its **peptide** nature and provides biolabile, lipophilic functions to penetrate the blood-brain barrier by passive transport. The design incorporates a dihydropyridine-type redox targetor moiety, an amino **acid** or di- or -tripeptide spacer inserted between the targetor and N-terminal amino **acid** unit of the **peptide** and a bulky, lipophilic substituent protecting the C-terminal amino **acid** unit of the **peptide**. The dihydropyridine-type targetor undergoes an enzymatically mediated oxidation to a hydrophilic, membrane-impermeable pyridinium salt. That polar targetor-peptide conjugate is trapped behind the lipoidal blood-brain barrier. Over time, **cleavage** of the lipophilic ester from the **peptide** by esterase and or lipase enzymes and **enzymatic cleavage** of the targetor-spacer from the **peptide** results in release of the desired **peptide** in the brain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 74 OF 75 USPATFULL on STN
AN 97:31398 USPATFULL
TI Biologically active ATP analogs
IN Jacobson, Kenneth A., Silver Spring, MD, United States
Fischer, Bilha, Holon, Israel
Maillard, Michel, Cambridge, MA, United States
PA The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)
PI US 5620676 19970415
AI US 1995-414438 19950331 (8)
RLI Continuation-in-part of Ser. No. US 1994-207870, filed on 8 Mar 1994, now abandoned
DT Utility

09567863

FS Granted
EXNAM Primary Examiner: Kight, John; Assistant Examiner: Jones, Dameron L.
LREP Leydig, Voit & Mayer, Ltd.
CLMN Number of Claims: 34
ECL Exemplary Claim: 1
DRWN 18 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 2653
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides certain novel adenosine triphosphate (ATP) analogs, pharmaceutical compositions, and methods of using such analogs in the treatment of septic shock and other disease conditions. Examples of the ATP analogs include the mono-, di- and triphosphates of adenosines with various selected substituents at the 2, 6, 8, and 9-positions, such as alkyl, alkylphenyl, phenylalkyl, S-alkyl, S-alkenyl, S-alkylcyano, S-phenyl, S-alkylphenyl, S-alkylamino, S-alkylthioalkyl, S-alkylthiocyanato, S-alkylaminophenyl, S-alkylnitrophenyl, hydroxy, bromo, fluoro, chloro, and aminoalkylamino. The present invention also provides pharmaceutical compositions of and methods of using certain xanthine and uracil derivatives for the above disease conditions. Examples of the xanthine derivatives include xanthines having alkyl or alkyltriphosphate substituents at the 1, 3, and 7-positions. Examples of the uracil derivatives include 5-fluoro- and 5-bromo uracil triphosphates. Also provided are assays for assessing the binding of the ATP analogs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L41 ANSWER 75 OF 75 USPATFULL on STN
AN 93:82982 USPATFULL
TI Specifically .beta.-.beta. cross-linked hemoglobins and method of preparation
IN Kluger, Ronald, Don Mills, Canada
Wodzinska, Jolanta, Scarborough, Canada
PA The University of Toronto Innovations Foundation, Toronto, Canada (non-U.S. corporation)
PI US 5250665 19931005
AI US 1991-746372 19910816 (7)
RLI Continuation-in-part of Ser. No. US 1991-707350, filed on 31 May 1991, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Wityshyn, Michael G.; Assistant Examiner: Touzeau, P. Lynn
LREP Bereskin & Parr
CLMN Number of Claims: 36
ECL Exemplary Claim: 1
DRWN 21 Drawing Figure(s); 21 Drawing Page(s)
LN.CNT 1279
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A modified hemoglobin comprising hemoglobin which is cross-linked with a cross-linking reagent. The cross-linking reagent is selected such that the .beta.-chains are cross-linked within the 2,3-diphosphoglycerate binding site and the linkage distance between the .beta.-chains is between about 5 to 9 angstroms. A method of preparing the modified hemoglobin and its use as a blood substitute or a plasma expander are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

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L2 152 L1 AND (PROTEIN? OR PEPTIDE? OR DRUG? OR ANTIGEN? OR ANTIBODY) NOT NUCLEIC ACID?

=> s l2 and (quaternary amine or tertiary amine)
L3 11 L2 AND (QUATERNARY AMINE OR TERTIARY AMINE)

=> dup rem l3
PROCESSING COMPLETED FOR L3
L4 11 DUP REM L3 (0 DUPLICATES REMOVED)

=> d l4 bib abs 1-11

L4 ANSWER 1 OF 11 USPATFULL on STN
AN 2002:259425 USPATFULL
TI Bile-acid conjugates for providing sustained systemic concentrations of **drugs**
IN Cundy, Kenneth C., Redwood City, CA, UNITED STATES
Gallop, Mark A., Los Altos, CA, UNITED STATES
PI US 2002142998 A1 20021003
AI US 2001-974768 A1 20011009 (9)
PRAI US 2000-238758P 20001006 (60)

09567863

US 2000-249804P 20001117 (60)
US 2001-297472P 20010611 (60)
DT Utility
FS APPLICATION
LREP Gerald F. Swiss, Esq., BURNS, DOANE, SWECKER & MATHIS, L.L.P., P.O. Box 1404, Alexandria, VA, 22313-1404
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 4028
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention is directed to compounds that provide for sustained systemic concentrations of therapeutic or prophylactic agents following administration to animals. This invention is also directed to pharmaceutical compositions including and methods using such compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 2 OF 11 USPATFULL on STN
AN 2002:206641 USPATFULL
TI Bile-acid conjugates for providing sustained systemic concentrations of **drugs**
IN Cundy, Kenneth C., Redwood City, CA, UNITED STATES
Gallop, Mark A., Los Altos, CA, UNITED STATES
Zhou, Cindy X., Palo Alto, CA, UNITED STATES
PI US 2002111338 A1 20020815
AI US 2001-972283 A1 20011005 (9)
PRAI US 2000-238758P 20001006 (60)
US 2000-249804P 20001117 (60)
US 2001-297472P 20010611 (60)
DT Utility
FS APPLICATION
LREP Gerald F. Swiss, Esq., BURNS, DOANE, SWECKER & MATHIS, L.L.P., P.O. Box 1404, Alexandria, VA, 22313-1404
CLMN Number of Claims: 55
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 3240
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention is directed to compounds that provide for sustained systemic concentrations of therapeutic or prophylactic agents following administration to animals. This invention is also directed to pharmaceutical compositions including and methods using such compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 11 USPATFULL on STN
AN 2002:32581 USPATFULL
TI Methods to treat alzheimer's disease
IN Hom, Roy, San Francisco, CA, UNITED STATES
Mamo, Shumeye S., Oakland, CA, UNITED STATES
Tung, Jay, Belmont, CA, UNITED STATES
Gailunas, Andrea, San Francisco, CA, UNITED STATES
John, Varghese, San Francisco, CA, UNITED STATES
Fang, Lawrence Y., Foster City, CA, UNITED STATES
PI US 2002019403 A1 20020214
AI US 2001-816876 A1 20010323 (9)
PRAI US 2000-191528P 20000323 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 63

09567863

ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 8655
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed toward substituted hydroxyethylene compounds of formula (XII) ##STR1##

useful in treating Alzheimer's disease and other similar diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 11 USPATFULL on STN
AN 2002:129931 USPATFULL
TI Cyclic tetrapeptide derivatives and medicinal use thereof
IN Nishino, Norikazu, Fukuoka, JAPAN
Yoshida, Minoru, Saitama, JAPAN
Horinouchi, Sueharu, Tokyo, JAPAN
Komatsu, Yasuhiko, Saitama, JAPAN
Mimoto, Tsutomu, Saitama, JAPAN
PA Japan Energy Corporation, Tokyo, JAPAN (non-U.S. corporation)
PI US 6399568 B1 20020604
WO 9911659 19990311
AI US 2000-486783 20000301 (9)
WO 1998-JP3893 19980901
20000301 PCT 371 date
PRAI JP 1997-237481 19970902
JP 1998-63270 19980313
DT Utility
FS GRANTED
EXNAM Primary Examiner: Russel, Jeffrey E.
LREP Fish & Richardson P.C.
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 7 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 2524
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A cyclic tetrapeptide derivative represented by the general formula (I): ##STR1##

wherein:

R.sub.11, R.sub.12, R.sub.21 and R.sub.22 independently denote a monovalent group selected from hydrogen, a linear or branched alkyl group with 6 or less carbon atoms, benzyl group, 4-methoxybenzyl group, 3-indolylmethyl group, (N-methoxy-3-indolyl) methyl group, (N-formyl-3-indolyl)methyl group, etc.; R.sub.3 denotes a divalent group selected from a linear chained hydrocarbon group with 3 or 4 carbon atoms, or the linear branched hydrocarbon group having a branched chain added to the chain, or a divalent group substituted with a heteroatom;

R.sub.4 denotes a divalent chained hydrocarbon group with 4 to 6 carbon atoms, or a divalent group derived from said hydrocarbon group by addition etc. of a branched chain on said chain; and a pharmaceutically acceptable salt thereof, or an analogous cyclic tetrapeptide derivative compound; as well as a histone deacetylase enzyme inhibitor, an MHC class-I molecule expression promoting agent and a pharmaceutical composition that comprise said cyclic tetrapeptide derivative as an effective ingredient.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 11 USPATFULL on STN

09567863

AN 2000:146146 USPATFULL
TI Cell-targeting molecule comprising a mutant human carboxypeptidase A
IN Smith, Gary Keith, Raleigh, NC, United States
Blumenkopf, Todd Andrew, Old Lyme, CT, United States
Cory, Michael, Chapel Hill, NC, United States
PA Glaxo Wellcome Inc., Research Triangle Park, NC, United States (U.S. corporation)
PI US 6140100 20001031
WO 9513095 19950518
AI US 1996-640906 19960509 (8)
WO 1994-GB2483 19941111
19960509 PCT 371 date
19960509 PCT 102(e) date
PRAI GB 1993-23429 19931112
DT Utility
FS Granted
EXNAM Primary Examiner: Achutamurthy, Ponnathapura; Assistant Examiner: Moore, William W.
LREP Grassler, Frank P., Bennett, Virginia C., Hrubiec, Robert T.
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 7 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 7473
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Conjugates of a cell targetting molecule and a mutant human carboxypeptidase A enzyme are provided. Suitable targetting molecules include antibodies, hormones, ligands, cytokines, **antigens**, oligonucleotides and peptidomimetics. Enzymes comprising a mutant human carboxypeptidase A enzyme are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 11 USPATFULL on STN
AN 1998:75658 USPATFULL
TI Compounds and methods
IN Chenera, Balan, Audubon, PA, United States
Elliott, John, Wayne, PA, United States
Moore, Michael, Media, PA, United States
Weinstock, Joseph, Phoenixville, PA, United States
PA SmithKline Beecham Corp., Philadelphia, PA, United States (U.S. corporation)
PI US 5773512 19980630
WO 9516712 19950622
AI US 1996-663148 19960612 (8)
WO 1994-US14414 19941215
19960612 PCT 371 date
19960612 PCT 102(e) date
DT Utility
FS Granted
EXNAM Primary Examiner: Dean, Karen A.
LREP Stein-Fernandez, Nora, Williams, Janice E., Lentz, Edward T.
CLMN Number of Claims: 26
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2484
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to libraries of non-**peptide** compounds each comprised of a core structure and methods for making such libraries. This invention also relates to novel silicon-based polymer resins and silane linkers, methods for their preparation and their use in the synthesis of libraries of compounds to be screened as pharmaceutical agents.

09567863

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 11 USPATFULL on STN
AN 1998:1437 USPATFULL
TI Biological targeting agents
IN Bower, Gary Robert, Aylesbury, United Kingdom
Forster, Alan Michael, High Wycombe, United Kingdom
Riley, Anthony Leonard Mark, Marlow, United Kingdom
Storey, Anthony Eamon, Nr. Amersham, United Kingdom
PA Amersham International PLC, Buckinghamshire, England (non-U.S. corporation)
PI US 5705143 19980106
WO 9519187 19950720
AI US 1996-676263 19960711 (8)
WO 1995-GB42 19950111
19960711 PCT 371 date
19960711 PCT 102(e) date
PRAI EP 1994-300224 19940112
DT Utility
FS Granted
EXNAM Primary Examiner: Kight, John; Assistant Examiner: Jones, Dameron
LREP Marshall, O'Toole, Gerstein, Murray & Borun
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1009
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A conjugate comprises a linear or cyclic synthetic **peptide** of 3-50 amino acids linked via one of its carboxyl groups and optionally via a linking group, to a polydentate metal chelating group, with the result that endo- or exo-peptidase metabolism of the **peptide** is substantially inhibited, with the provisos that: a) the **peptide** chain contains a biological targeting sequence which is biologically active; b) when the spacer is absent the metal chelating group does not comprise solely **peptide** moieties; c) the metal chelating group does not contain thiol donors. A complex of the conjugate with a metal atom chelated by the metal chelating group is useful in medicine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 8 OF 11 USPATFULL on STN
AN 97:99376 USPATFULL
TI Betides and methods for screening **peptides** using same
IN Rivier, Jean E. F., La Jolla, CA, United States
Porter, John S., Leucadia, CA, United States
PA The Salk Institute for Biological Studies, San Diego, CA, United States (U.S. corporation)
PI US 5681928 19971028
AI US 1994-358184 19941216 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Tsang, Cecilia J.; Assistant Examiner: Gupta, Anish
LREP Fitch, Even, Tabin & Flannery
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1850
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds are provided termed "betides" which mimic **peptides** and which contain one or more residues of aminoglycine, C.sup..alpha.

-aminoalanine, aminosarcosine or the like wherein the side chain amino group has been acylated and optionally also alkylated. Generally, betides have the formula:

X.sub.N --X.sub.1 --X.sub.2 --X.sub.3 --X.sub.m --X.sub.4 --X.sub.5 --X.sub.6 --X.sub.C, where X.sub.N is an acyl or other N-terminal group or a **peptide** up to about 50 amino acids in length having such a group; X.sub.C is OH, NH.sub.2 or other C-terminal group or a **peptide** up to about 50 amino acids in length having such a group; and X.sub.1 -X.sub.6 are each independently a betide amino acid or .alpha.-amino acid or des-X; and X.sub.m is a **peptide** up to about 50 amino acids or des-X; provided however that at least one of X.sub.1 -X.sub.6 is a betide amino acid residue having the formula: ##STR1## wherein R.sub.o is H or CH.sub.3, R and R.sub.2 are H or lower alkyl, and R.sub.3 is an acyl group, an isocyanate group, an isothiocyanate group or a sulfonyl group. In methods for making betides, an aminoglycine residue can be subjected to side chain acylation, and optionally also alkylation, after it has been incorporated into a **peptide** intermediate. This method can be used as a valuable tool to synthesize and screen multiple substituents at one or more positions in a **peptide**, permitting simultaneous screening of betides which mimic **peptides** having a large number of natural or unnatural amino acid substituents at a particular position, and optionally both D- and L-isomers of those substituents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 9 OF 11 USPATFULL on STN
AN 96:53320 USPATFULL
TI Dynemicin analogs: syntheses, methods of preparation and use
IN Smith, Adrian L., Bishops Stortford, England
Hwang, Chan-Kou, San Diego, CA, United States
Wendeborn, Sebastian V., La Jolla, CA, United States
Nicolaou, Kyriacos C., La Jolla, CA, United States
Schreiner, Erwin P., Vienna, Austria
Stahl, Wilhelm, Frankfurt am Main, Germany, Federal Republic of
Dai, Wei-Min, Kowloon, Hong Kong
Maligres, Peter E., Scotch Plains, NJ, United States
Suzuki, Toshio, Niigata, Japan
PA The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)
PI US 5527805 19960618
AI US 1994-184580 19940121 (8)
RLI Division of Ser. No. US 1992-939104, filed on 1 Sep 1992, now patented, Pat. No. US 5281710 which is a continuation-in-part of Ser. No. US 1992-886984, filed on 21 May 1992, now patented, Pat. No. US 5276159 which is a continuation-in-part of Ser. No. US 1991-788225, filed on 5 Nov 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-734613, filed on 23 Jul 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-673199, filed on 21 Mar 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-562269, filed on 1 Aug 1990, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Tsang, Cecilia
LREP Welsh & Katz, Ltd.
CLMN Number of Claims: 45
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 7742
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A fused ring system compound is disclosed that contains an epoxide group

on one side of the fused rings and an enediyne macrocyclic ring on the other side of the fused rings. The compounds have DNA-cleaving, antimicrobial and tumor growth-inhibiting properties. Chimeric compounds having the fused ring system compound as an aglycone bonded to (i) a sugar moiety as the oligosaccharide portion or (ii) a monoclonal **antibody** or **antibody** combining site portion thereof that immunoreacts with target tumor cells are also disclosed. Compositions containing a compound or a chimer are disclosed, as are methods of preparing a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 10 OF 11 USPATFULL on STN
AN 94:7803 USPATFULL
TI Dynemicin analogs: synthesis, methods of preparation and use
IN Smith, Adrian L., Bishops Stortford, England
Hwang, Chan-Kou, San Diego, CA, United States
Wenderborn, Sebastian V., La Jolla, CA, United States
Nicolaou, Kyriacos C., La Jolla, CA, United States
Schreiner, Erwin P., Gerasdorf, Austria
Stahl, Wilhelm, Frankfurt am Main, Germany, Federal Republic of
Dai, Wei-Min, Clear Water Bay, Hong Kong
Maligres, Peter E., Scotch Plains, NJ, United States
Suzuki, Toshio, Niigata, Japan
PA The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)
PI US 5281710 19940125
AI US 1992-939104 19920901 (7)
RLI Continuation-in-part of Ser. No. US 1992-886984, filed on 21 May 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-788225, filed on 5 Nov 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-734613, filed on 23 Jul 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-673199, filed on 21 Mar 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-562269, filed on 1 Aug 1990, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Tsang, Cecilia
LREP Dressler, Goldsmith, Shore & Milnamow, Ltd.
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 7247
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A fused ring system compound is disclosed that contains an epoxide group on one side of the fused rings and an enediyne macrocyclic ring on the other side of the fused rings. The compounds have DNA-cleaving, antimicrobial and tumor growth-inhibiting properties. Chimeric compounds having the fused ring system compound as an aglycone bonded to (i) a sugar moiety as the oligosaccharide portion or (ii) a monoclonal **antibody** or **antibody** combining site portion thereof that immunoreacts with target tumor cells are also disclosed. Compositions containing a compound or a chimer are disclosed, as are methods of preparing a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 11 OF 11 USPATFULL on STN
AN 94:1550 USPATFULL
TI Dynemicin analogs: syntheses, methods of preparation and use
IN Smith, Adrian L., Bishops Stortford, England

Hwang, Chan-Kou, San Diego, CA, United States
Wendeborn, Sebastian V., La Jolla, CA, United States
Nicolaou, Kyriacos C., La Jolla, CA, United States
Schreiner, Erwin P., Vienna, Austria
Stahl, Wilhelm, Frankfurt am Main, Germany, Federal Republic of
Dai, Wei-Min, San Diego, CA, United States
Maligres, Peter E., La Jolla, CA, United States
Suzuki, Toshio, Niigata, Japan
PA The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)
PI US 5276159 19940104
AI US 1992-886984 19920521 (7)
RLI Continuation-in-part of Ser. No. US 1991-788225, filed on 5 Nov 1991 which is a continuation-in-part of Ser. No. US 1991-734613, filed on 23 Jul 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-673199, filed on 21 Mar 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-562269, filed on 1 Aug 1990, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Tsang, Cecilia
LREP Dressler, Goldsmith, Shore, Sutker & Milnamow, Ltd.
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 8 Drawing Page(s)
LN.CNT 6827
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A fused ring system compound is disclosed that contains an epoxide group on one side of the fused rings and an enediyne macrocyclic ring on the other side of the fused rings. The compounds have DNA-cleaving, antimicrobial and tumor growth-inhibiting properties. Chimeric compounds having the fused ring system compound as an aglycone bonded to (i) a sugar moiety as the oligosaccharide portion or (ii) a monoclonal **antibody** or **antibody** combining site portion thereof that immunoreacts with target tumor cells are also disclosed. Compositions containing a compound or a chimer are disclosed, as are methods of preparing a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

09567863

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> d his

     (FILE 'HOME' ENTERED AT 11:46:47 ON 17 SEP 2003)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 11:47:05 ON
     17 SEP 2003
L1           865 S (PROTEIN? OR PEPTIDE? OR DRUG? OR ANTIGEN? OR ANTIBODY)(6A) C
L2           152 S L1 AND (PROTEIN? OR PEPTIDE? OR DRUG? OR ANTIGEN? OR ANTIBODY
L3            11 S L2 AND (QUATERNARY AMINE OR TERTIARY AMINE)
L4            11 DUP REM L3 (0 DUPLICATES REMOVED)

=> s mass spectro?/ti
L5       115434 MASS SPECTRO?/TI

=> s l5 and (protein? or peptide? or drug? or antigen? or antibody)(6a)
cleav?(6a)link?(l) mass spectro?
   2 FILES SEARCHED...
L6           33 L5 AND (PROTEIN? OR PEPTIDE? OR DRUG? OR ANTIGEN? OR ANTIBODY)(
                6A) CLEAV?(6A) LINK?(L) MASS SPECTRO?

=> dup rem l6
PROCESSING COMPLETED FOR L6
L7            19 DUP REM L6 (14 DUPLICATES REMOVED)

=> d l7 bib abs 1-19

L7   ANSWER 1 OF 19  WPIDS  COPYRIGHT 2003 THOMSON DERWENT on STN
AN   2003-513527 [48]   WPIDS
DNC  C2003-137460
TI   New, preferably isotopically labeled affinity tag compounds, useful in
     analyzing proteins by mass spectrometry, comprise
     affinity ligand, protein reactive group and acid-
     cleavable thiourea derivative linker.
DC   B04 E19 J04 K08
IN   IMMLER, D; LERCHEN, H; LOCKHOFF, O; SIEGMUND, H
PA   (FARB) BAYER AG
CYC  101
PI   WO 2003040093 A2 20030515 (200348)* DE   65p
        RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU
            MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
            DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
            KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
            RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA
            ZM ZW
     DE 10234416   A1 20030522 (200348)
ADT  WO 2003040093 A2 WO 2002-EP12106 20021030; DE 10234416 A1 DE 2002-10234416
     20020729
PRAI DE 2002-10234416 20020729; DE 2001-10154753 20011109
AN   2003-513527 [48]   WPIDS
AB   WO2003040093 A UPAB: 20030729
     NOVELTY - New affinity tag compounds (I) (preferably isotopically labeled
     with carbon-13 and optionally nitrogen-15) consisting of an affinity
     ligand residue covalently bonded to a protein reactive group via a linking
     group. The linking group contains an acid-cleavable N-phenylene-thiourea
     derivative group (a).
          DETAILED DESCRIPTION - Affinity tag compounds of formula A-L-P' (I)
     and their salts are new.
          A = affinity ligand residue;
          P' = protein reactive group;
          L = covalent linking group, containing an acid-cleavable residue T;
          T = thiourea-based group of formula (i);
```

Y = spacer group having an optionally branched chain or 1-10 (preferably 1-5) non-hydrogen atoms; and

D = amino acid side-chain.

INDEPENDENT CLAIMS are also included for the preparation of preferred compounds (I), i.e. (I').

USE - The use of (I), in isotopically labeled form, is claimed as a reagent for the mass spectrometric analysis of proteins, especially for identifying protein(s) or protein functions in samples containing one or more protein(s). (I) can also be used to determine the relative protein expression levels in samples containing one or more protein(s). Isotopically labeled (I) are designated 'ICAT's' (isotope coded affinity tags).

ADVANTAGE - The acid-labile group T serves as a pre-determined cleavage site for acid-induced cleavage of the affinity label, e.g. to facilitate release on an affinity column to make the residue attached to the protein smaller and/or make the processing more efficient. In particular the residue T allows decomplexation of peptide fragments by efficient streptavidin-based affinity chromatography for biotin-modified peptide fragments. The tags remaining on the protein fragments after acidolysis have a markedly reduced molecular weight and higher isotope density. The affinity tags also have higher solubility than prior art analogs.

Dwg.0/4

L7 ANSWER 2 OF 19 USPATFULL on STN
AN 2003:237826 USPATFULL
TI Proteomic determination of protein nitrotyrosine modifications using **mass spectrometry**
IN Gibson, Bradford W., Berkeley, CA, UNITED STATES
Ghosh, Soumitra S., San Diego, CA, UNITED STATES
Davis, Robert E., San Diego, CA, UNITED STATES
PI US 2003165983 A1 20030904
AI US 2001-847522 A1 20010501 (9)
PRAI US 2000-201177P 20000502 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 1959
AB Compositions and methods are provided for identifying oxidative modifications of proteins by mass spectrometric analysis, including MALDI-TOF MS, of protein and peptide fractions of biological samples to determine specific occurrences of nitrotyrosine at amino acid sequence and proteomic levels. Diagnostic methods for diseases characterized by elevated free radicals and oxidative stress, and screening assays for therapeutic agents useful in treating such diseases, are also disclosed.

L7 ANSWER 3 OF 19 USPATFULL on STN
AN 2003:3430 USPATFULL
TI **Mass spectrometric** detection of polypeptides
IN Little, Daniel, Boston, MA, UNITED STATES
Koster, Hubert, La Jolla, CA, UNITED STATES
Higgins, G. Scott, Paisley, UNITED KINGDOM
Lough, David, Berwickshire, UNITED KINGDOM
PI US 2003003465 A1 20030102
AI US 2001-7557 A1 20011106 (10)
RLI Continuation of Ser. No. US 2000-664977, filed on 18 Sep 2000, GRANTED, Pat. No. US 6387628 Division of Ser. No. US 1998-146054, filed on 2 Sep

1998, GRANTED, Pat. No. US 6322970 Continuation-in-part of Ser. No. US 1997-922201, filed on 2 Sep 1997, GRANTED, Pat. No. US 6207370
DT Utility
FS APPLICATION
LREP HELLER EHRMAN WHITE & MCAULIFFE LLP, 4250 EXECUTIVE SQ, 7TH FLOOR, LA JOLLA, CA, 92037
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 4195
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A process for ascertain sequence information about a nucleic acid molecule by determining the identity of a polypeptide using mass spectroscopy is provided. Depending on the polypeptide to be identified, a process as disclosed is used, for example, to diagnose a genetic disease or chromosomal abnormality, a predisposition to a disease or condition, or infection by a pathogenic organism; or for determining identity or heredity. Kits for performing the disclosed processes also are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 4 OF 19 USPATFULL on STN
AN 2002:3839 USPATFULL
TI Sequencing of peptides by **mass spectrometry**
IN Chu, Ivan K., Toronto, CANADA
Lau, Tai-Chu, Kowloon, HONG KONG
Siu, K. W. Michael, Toronto, CANADA
PA YORK UNIVERSITY (non-U.S. corporation)
PI US 2002001814 A1 20020103
AI US 2001-804866 A1 20010313 (9)
PRAI US 2000-193208P 20000330 (60)
DT Utility
FS APPLICATION
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 16 Drawing Page(s)
LN.CNT 834
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A strategy for semiautomatic sequencing of argentinated (silver-containing) oligopeptides is described. The method of sequencing described is based on a search algorithm that identifies a triplet peak relationship in a product ion spectrum of the [M+Ag].sup.+ ion of an oligopeptide. The ions that constitute a triplet are [b.sub.n+OH+Ag].sup.+, [b.sub.n-H+Ag].sup.+, and [a.sub.n-H+Ag].sup.+, which are separated by 18 and 28 m/z units, respectively. The difference in the m/z values of adjacent triplets identifies the residue that is "cleaved". Observation of the [y.sub.n+H+Ag].sup.+ ion containing the cleaved residue confirms the assignment.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 5 OF 19 USPATFULL on STN
AN 2002:108823 USPATFULL
TI **Mass spectrometric** detection of polypeptides
IN Little, Daniel, Boston, MA, United States
Koster, Hubert, La Jolla, CA, United States
Higgins, G. Scott, Paisley, UNITED KINGDOM
Lough, David, Berwickshire, UNITED KINGDOM
PA Sequenom, Inc., San Diego, CA, United States (U.S. corporation)
PI US 6387628 B1 20020514

09567863

AI US 2000-664977 20000918 (9)
RLI Division of Ser. No. US 1998-146054, filed on 2 Sep 1998
Continuation-in-part of Ser. No. US 1997-922201, filed on 2 Sep 1997
DT Utility
FS GRANTED
EXNAM Primary Examiner: Campbell, Eggerton A.
LREP Heller Ehrman White & McAuliffe
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 4716
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A process for determining the identity of a target polypeptide using mass spectroscopy is provided. Depending on the target polypeptide to be identified, a process as disclosed can be used, for example, to diagnose a genetic disease or chromosomal abnormality, a predisposition to a disease or condition, or infection by a pathogenic organism; or for determining identity or heredity. Kits for performing the disclosed processes also are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 6 OF 19 MEDLINE on STN DUPLICATE 1
AN 2002292953 MEDLINE
DN 22029210 PubMed ID: 12033289
TI Identification of components of protein complexes using a fluorescent photo-cross-linker and **mass spectrometry**.
AU Wine Robert N; Dial John M; Tomer Kenneth B; Borchers Christoph H
CS Laboratory of Toxicology, National Institute of Environmental Health Sciences/NIH, Research Triangle Park, North Carolina 27713, USA.
SO ANALYTICAL CHEMISTRY, (2002 May 1) 74 (9) 1939-45.
Journal code: 0370536. ISSN: 0003-2700.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200304
ED Entered STN: 20020530
Last Updated on STN: 20030406
Entered Medline: 20030404
AB This study describes a novel method for improving the specific recognition, detection, and identification of proteins involved in multiprotein complexes. The method is based on a combination of coimmunoprecipitation, chemical cross-linking, and specific fluorescent tagging of protein components in close association with one another. Specific fluorescent tagging of the **protein** complex components was achieved using the **cleavable**, fluorescent cross-**linker** sulfosuccinimidyl 2-(7-azido-4-methylcoumarin-3-acetamido) ethyl-1,3'-dithiopropionate (SAED). Following dissociation and separation by SDS-PAGE, the fluorescently tagged proteins are then visualized by UV illumination, excised, and, following in-gel digestion, identified by **mass spectrometry**. In this study, a complex of the HIV-envelope protein gp120 and its cellular receptor CD4 was used as a model system. The sensitivity of detection of fluorescent SAED-labeled proteins in SDS gels, and the sensitivity of the **mass spectrometric** identification of fluorescent proteins after in-gel digestion, is in the range of a few hundred femtomoles of protein. This sensitivity is comparable to that achieved with silver-staining techniques, but fluorescence detection is protein independent and no background interference occurs. Furthermore, fluorescence labeling is significantly more compatible with **mass spectrometric** identification of proteins than is silver staining. The first application

of this strategy was in the investigation of the mechanism of spermiation, the process by which mature spermatids separate from Sertoli cells. For the coimmunoprecipitation experiment, an antibody against paxillin, a protein involved in spermatid-Sertoli cell junctional complexes, was used. More components of the paxillin protein complex were visible by fluorescence detection of SAED-labeled proteins than were visible on comparable silver-stained gels. **Mass spectrometric** analysis of the fluorescently labeled proteins identified integrin alpha6 precursor as a protein associated in a complex with paxillin. The identification of integrin alpha6 precursor was confirmed by Western blot analysis and verifies the applicability of this novel approach for identifying proteins involved in protein complexes.

L7 ANSWER 7 OF 19 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 2001-283056 [30] WPIDS
DNN N2001-201704 DNC C2001-086479
TI Identifying members of specific binding pairs, especially receptor-protein pairs, comprises analyzing ligands bound to an array of binding molecules by **mass spectrometry**.
DC A89 B04 D16 K08 S03
IN BITTORF, T; KRAUSE, E; SCHNEIDER-MERGENER, J
PA (JERI-N) JERINI BIO TOOLS GMBH; (JERI-N) JERINI BIOTOOLS GMBH; (JERI-N) JERINI AG
CYC 95
PI DE 19943743 A1 20010315 (200130)* 10p
WO 2001018545 A2 20010315 (200130) DE
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000076442 A 20010410 (200137)
DE 19943743 C2 20020207 (200212)
DE 10082703 T 20020214 (200220)
EP 1212622 A2 20020612 (200239) DE
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
CZ 2002000660 A3 20021016 (200279)
HU 2002003074 A2 20021228 (200308)
JP 2003511652 W 20030325 (200330) 28p
ADT DE 19943743 A1 DE 1999-19943743 19990903; WO 2001018545 A2 WO 2000-DE3071 20000901; AU 2000076442 A AU 2000-76442 20000901; DE 19943743 C2 DE 1999-19943743 19990903; DE 10082703 T DE 2000-10082703 20000901, WO 2000-DE3071 20000901; EP 1212622 A2 EP 2000-965834 20000901, WO 2000-DE3071 20000901; CZ 2002000660 A3 WO 2000-DE3071 20000901, CZ 2002-660 20000901; HU 2002003074 A2 WO 2000-DE3071 20000901, HU 2002-3074 20000901; JP 2003511652 W WO 2000-DE3071 20000901, JP 2001-522083 20000901
FDT AU 2000076442 A Based on WO 2001018545; DE 10082703 T Based on WO 2001018545; EP 1212622 A2 Based on WO 2001018545; CZ 2002000660 A3 Based on WO 2001018545; HU 2002003074 A2 Based on WO 2001018545; JP 2003511652 W Based on WO 2001018545
PRAI DE 1999-19943743 19990903
AN 2001-283056 [30] WPIDS
AB DE 19943743 A UPAB: 20010603
NOVELTY - Identifying members of specific binding pairs, comprising producing a position-specific array of binding molecules on a support by applying small volumes of reagents and performing at least two sequential reactions, incubating the array with a mixture of ligands, removing any unbound ligands, and characterizing any bound ligands by **mass spectrometry**, is new.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a

robot for carrying out the novel process.

USE - For identifying proteins or nucleic acids that bind to a target protein or nucleic acid using an array of peptides or oligonucleotides representing fragments of the target protein or nucleic acid, especially for identifying intracellular protein ligands for a target receptor (e.g. erythropoietin receptor) by:

(a) synthesizing an array of peptides (preferably comprising 6-15 amino acids) corresponding to fragments of the receptor, contacting the array with a radiolabeled cell lysate;

(b) determining the positions of bound proteins by autoradiography;

(c) cleaving the bound proteins from the array (e.g. by proteolytically or chemically **cleaving** a **linker** between the **peptides** and the support);

(d) determining the molecular weights of the bound proteins by **mass spectrometry**, especially using matrix-assisted laser desorption ionization or electrospray ionization; and

(e) comparing the results with a database of protein molecular weights.

ADVANTAGE - The process is readily automated.

Dwg.0/6

L7 ANSWER 8 OF 19 USPATFULL on STN
AN 2001:214828 USPATFULL
TI **Mass spectrometric** detection of polypeptides
IN Little, Daniel, Boston, MA, United States
Koster, Hubert, La Jolla, CA, United States
Higgins, G. Scott, Paisley, United Kingdom
Lough, David, Berwickshire, United Kingdom
PA Sequenom, Inc., San Diego, CA, United States (U.S. corporation)
PI US 6322970 B1 20011127
AI US 1998-146054 19980902 (9)
RLI Continuation-in-part of Ser. No. US 1997-922201, filed on 2 Sep 1997
DT Utility
FS GRANTED
EXNAM Primary Examiner: Campbell, Eggerton A.
LREP Seidman, Stephanie L.Heller Ehrman White & McAuliffe LLP
CLMN Number of Claims: 95
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 4786
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A process for determining the identity of a target polypeptide using mass spectroscopy is provided. Depending on the target polypeptide to be identified, a process as disclosed can be used, for example, to diagnose a genetic disease or chromosomal abnormality, a predisposition to a disease or condition, or infection by a pathogenic organism; or for determining identity or heredity. Kits for performing the disclosed processes also are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:720145 CAPLUS
DN 136:54014
TI Static secondary ion **mass spectrometry** to monitor solid-phase peptide synthesis
AU Maux, D.; Enjalbal, C.; Martinez, J.; Aubagnac, J.-L.; Combarieu, R.
CS Laboratoire des Aminoacides, Peptides, et Proteines, Universites Montpellier I & II, Montpellier, Fr.
SO Journal of the American Society for Mass Spectrometry (2001), 12(10), 1099-1105
CODEN: JAMSEF; ISSN: 1044-0305

09567863

PB Elsevier Science Inc.
DT Journal
LA English
AB Insights into the direct monitoring of supported peptide synthesis were realized through the design of time of flight static secondary ion mass spectrometry (TOF-S-SIMS) expts. The mass spectrometric method was carried out at the resin bead level and was found reproducible (intra- and inter-day assays), sensitive (femtomol level) and non-destructive (only 0.01% of the peptides were destroyed by the primary ion beam bombardment). The nature of the peptide-resin linkage governed the recovery of ions characterizing the whole peptide sequence. A S-SIMS cleavable bond was thus required solely in that position to achieve the release of the growing structures from the insol. support into the gas phase without any fragmentation. Results are presented with std. solid-phase resins allowing linkage through an amide or an ester bond. The latter was orthogonally broken upon the bombardment and thus constituted a convenient S-SIMS cleavable bond.
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 2
AN 2000:424647 BIOSIS
DN PREV200000424647
TI Chemical cross-**linking** with thiol-**cleavable** reagents combined with differential **mass spectrometric** **peptide** mapping: A novel approach to assess intermolecular protein contacts.
AU Bennett, Keiryn L. (1); Kussmann, Martin; Bjork, Per; Godzwon, Magdalena; Mikkelsen, Marie; Sorensen, Poul; Roepstorff, Peter
CS (1) Protein Research Group, Department of Molecular Biology, University of Southern Denmark, Campusvej 55, DK-5230, Odense M Denmark
SO Protein Science, (August, 2000) Vol. 9, No. 8, pp. 1503-1518. print.
ISSN: 0961-8368.
DT Article
LA English
SL English
AB The intermolecular contact regions between monomers of the homodimeric DNA binding protein ParR and the interaction between the glycoproteins CD28 and CD80 were investigated using a strategy that combined chemical crosslinking with differential MALDI-MS analyses. ParR dimers were modified in vitro with the thiol-cleavable cross-linker 3,3'-dithio-bis(succinimidylproprionate) (DTSSP), proteolytically digested with trypsin and analyzed by MALDI-MS peptide mapping. Comparison of the peptide maps obtained from digested cross-linked ParR dimers in the presence and absence of a thiol reagent strongly supported a "head-to-tail" arrangement of the monomers in the dimeric complex. Glycoprotein fusion constructs CD28-IgG and CD80-Fab were cross-linked in vitro by DTSSP, characterized by non-reducing SDS-PAGE, digested in situ with trypsin and analyzed by MALDI-MS peptide mapping (+- thiol reagent). The data revealed the presence of an intermolecular cross-link between the receptor regions of the glycoprotein constructs, as well as a number of unexpected but nonetheless specific interactions between the fusion domains of CD28-IgG and the receptor domain of CD80-Fab. The strategy of chemical cross-linking combined with differential MALDI-MS peptide mapping (+- thiol reagent) enabled localization of the interface region(s) of the complexes studied and clearly demonstrates the utility of such an approach to obtain structural information on interacting noncovalent complexes.

L7 ANSWER 11 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 3
AN 1999:35371 BIOSIS

09567863

DN PREV199900035371
TI Noncovalent RNA-peptide complexes detected by matrix-assisted laser desorption/ionization **mass spectrometry**.
AU Thiede, Bernd (1); Von Janta-Lipinski, Martin
CS (1) Max-Delbrueck-Centrum Mol. Med., Robert-Rossle-Str. 10, D-13122 Berlin Germany
SO Rapid Communications in Mass Spectrometry, (1998) Vol. 12, No. 23, pp. 1889-1894.
ISSN: 0951-4198.
DT Article
LA English
AB Matrix-assisted laser desorption/ionization **mass spectrometry** (MALDI-MS) was used to explore noncovalent interactions between different peptides and ribose nucleic acids (RNAs). One RNA was mixed together with two or more peptides or vice versa to compare the different effects of the molecules for noncovalent complex formation. The matrix 2,4,6-trihydroxyacetophenone was considered optimal for these studies due to the fact that peptides and RNA showed roughly the same peak intensities, in negative ion mode, as well as RNA-peptide complexes being detected. The formation of the noncovalent RNA-peptide complexes showed a correlation with the number of the basic amino acids arginine, lysine and histidine. The strongest influence of these amino acids for complex formation was obtained with arginine. Although different RNA molecules were used with different compositions and secondary structures, no specific effects to complex formation was observed. The comparison of noncovalent complexes with covalent RNA-peptide complexes, which were obtained from ribosomal subunits after cross-**linking** and enzymatic **cleavages**, showed that the specific RNA-**protein** interactions are dependent on the three-dimensional structure of the ribosome and its components. The results of this report indicate that MALDI-MS may be useful for the study of noncovalent interactions, in particular for peptides and RNA.

L7 ANSWER 12 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 4
AN 1997:14041 BIOSIS
DN PREV199799313244
TI In vitro biotransformation of dynorphin A (1-17) is similar in human and rhesus monkey blood as studied by matrix-assisted laser desorption/ionization **mass spectrometry**.
AU Yu, Jim (1); Butelman, Eduardo R.; Woods, James H.; Chait, Brian T.; Kreek, Mary Jeanne
CS (1) Rockefeller Univ., Box 171, 1230 York Ave., New York, NY 10021 USA
SO Journal of Pharmacology and Experimental Therapeutics, (1996) Vol. 279, No. 2, pp. 507-514.
ISSN: 0022-3565.
DT Article
LA English
AB Dynorphin A (1-17) (Dyn A (1-17)) is an endogenous opioid peptide. In vitro biotransformation of Dyn A (1-17) in human and rhesus monkey blood was studied by matrix-assisted laser desorption/ionization **mass spectrometry**. Biotransformation was observed to produce various opioid and nonopioid dynorphin A peptides. In this study, in vitro Dyn A (1-17) biotransformation at physiological temperature (37 degree C) was found to be very similar in human and rhesus monkey blood, although Dyn A (1-17) processing occurred at a faster rate in vitro in monkey blood than in human blood. One dominant pathway in this biotransformation was the slow removal of tyrosine at position one from Dyn A (1-17) to yield the dominant product, Dyn A (2-17). Further slow biotransformation of Dyn A (2-17) also occurred. Another major pathway of Dyn A (1-17) biotransformation is **cleavage** of the **peptide linkage** between Arg(6) and Arg(7) to produce the opioid peptide,

Dyn A (1-6), and the nonopioid peptide, Dyn A (7-17). These two peptides had a short lifetime in blood, undergoing rapid biotransformation. Our results indicate that the rhesus monkey may be a good model for further in vivo pharmacological and neurobiological studies.

L7 ANSWER 13 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 5
AN 1995:16425 BIOSIS
DN PREV199598030725
TI Charge state specific facile gas-phase cleavage of Asp 75-Met 76 peptide bond in the alpha-chain of human apohemoglobin probed by electrospray ionization **mass spectrometry**.
AU Bakhtiar, R.; Wu, Q.; Hofstadler, S. A.; Smith, R. D. (1)
CS (1) Chem. Sci. Dep., Pacific Northwest Lab., Richland, WA 99352 USA
SO Biological Mass Spectrometry, (1994) Vol. 23, No. 11, pp. 707-710.
ISSN: 1052-9306.
DT Article
LA English
AB Herein, we present the first example of charge state specific facile gas-phase **cleavage** of an aspartic acid-ethionine **peptide linkage**. This **cleavage** (Asp 75-Met 76) was observed in the alpha-chain of human adult hemoglobin (Hb) and was probed by electrospray ionization **mass spectrometry**. This specific conformational and/or charge density dependent dissociation was observed primarily in the (M + 11H)-11+ and (M + 12H)-12+ species. A mechanism involving an intramolecular proton transfer from the protonated carboxyl side chain of Asp 75 to the neighboring Met 76 residue yielding an anhydride moiety at the C-terminal of the Asp 75 is proposed. Dramatic differences in dissociation of (M + 13H)-13+ and (M + 14H)-14+ species were observed.

L7 ANSWER 14 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 6
AN 1992:483333 BIOSIS
DN BA94:114708
TI PALMITYLATION OF A G-PROTEIN COUPLED RECEPTOR DIRECT ANALYSIS BY TANDEM **MASS SPECTROMETRY**.
AU PAPAC D I; THORNBURG K R; BULLESBACH E E; CROUCH R K; KNAPP D R
CS DEP. CELL MOLECULAR PHARMACOLOGY, MEDICAL UNIVERSITY SOUTH CAROLINA, CHARLESTON, S.C. 29425.
SO J BIOL CHEM, (1992) 267 (24), 16889-16894.
CODEN: JBCHA3. ISSN: 0021-9258.
FS BA; OLD
LA English
AB Bovine rhodopsin has been reported to the S-palmitylated at cysteines 322 and 323 (Ovchinnikov, Y. A., Abdulaev, N. G., and Bogachuk, A. S. (1988) FEBS Lett. 230, 1-5). Using a combination of enzymatic and chemical cleavage techniques in conjunction with tandem **mass spectrometry**, the sites of incorporation of the palmityl groups are shown. Bovine rhodopsin in disc membranes was digested with thermolysin to generate the C-termin fragment (241-327), which was subsequently cleaved with cyanogen bromide to generate the peptide Val-Thr-Thr-Leu-Cys-Cys-Gly-Lys-Asn-Pro (318-327). A bis-S-palmitylated synthetic standard had the same retention time by reversed-phase high performance liquid chromatography as the isolated peptide and the same molecular weight (MH+ 1511.7) by liquid secondary ion **mass spectrometry**. Dithiothreitol reduction of both the isolated and the synthetic **peptide cleaved** the two thioester-**linked** palmityl groups to produce reduction products of the same appropriately decrased molecular weight (MH+ 1035.5). Tandem **mass spectrometry** of the isolated and the synthetic peptide identified the sites of attachment of the palmitoyl groups on cysteins 322 and 323.

These results prove the modification of cysteines 322 and 323 with palmitic acid in bovine rhodopsin, and illustrate the utility of **mass spectrometry** to characterize the post-translational modifications in G-protein coupled receptors.

L7 ANSWER 15 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1992:207429 BIOSIS
DN BA93:107654
TI CHARACTERIZATION OF DISULFIDE BOND POSITION IN PROTEINS AND SEQUENCE ANALYSIS OF CYSTINE-BRIDGED PEPTIDES BY TANDEM **MASS SPECTROMETRY**.
AU BEAN M F; CARR S A
CS DEP. PHYSICAL STRUCTURAL CHEM., SMITHKLINE BEECHAM PHARM., P.O. BOX 1539, KING OF PRUSSIA, PA. 19406.
SO ANAL BIOCHEM, (1992) 201 (2), 216-226.
CODEN: ANBCA2. ISSN: 0003-2697.
FS BA; OLD
LA English
AB Tandem **mass spectrometry** employing high-energy, collisionally activated dissociation (CAD) is shown to be a useful method for sequencing through the cystine bridge of intermolecularly disulfide-bonded peptides. A characteristic triplet of intense fragment ions is observed corresponding to cleavage through and to either side of the disulfide bridge. These fragments define the masses of the **linked peptides**. Fragments due to **peptide** chain **cleavage** are also observed at lower abundnace in the product-ion spectra and can be sufficient to sequence both of the disulfide-linked peptides without any prior knowledge of the peptide or protein sequence. Even in cases where the peptide sequence-related product-ion yields are poor, the intensities of the disulfide cleavage ions are usually sufficient to determine the molecular weights of the component cystine-bridged peptides. In this paper we demonstrate that the high-energy CAD tandem MS approach may be used to characterize-bonded peptides directly in complex enzymatic or chemical digests of native proteins. This obviates the need for individual purification of intermolecularly disulfide-linked peptides prior to analysis. The techniques are illustrated here for synthetic, inter- and intramolecularly disulfide-linked peptides and for human transforming growth factor-.alpha. (des-Val- Val-TGF-.alpha.), a compact protein containing 48 residues and three disulfides.

L7 ANSWER 16 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 7
AN 1992:472445 BIOSIS
DN BA94:103820
TI A METHOD FOR DETERMINATION OF N GLYCOSYLATION SITES IN GLYCOPROTEINS BY COLLISION-INDUCED DISSOCIATION ANALYSIS IN FAST ATOM BOMBARDMENT **MASS SPECTROMETRY** IDENTIFICATION OF THE POSITIONS OF CARBOHYDRATE-LINKED ASPARAGINE IN RECOMBINANT ALPHA AMYLASE BY TREATMENT WITH PEPTIDE-N-GLYCOSIDASE F IN OXYGEN-18 LABELED WATER.
AU GONZALEZ J; TAKAO T; HORI H; BESADA V; RODRIGUEZ R; PADRON G; SHIMONISHI Y
CS INST. PROTEIN RES., OSAKA UNIVERSITY, YAMADAOKA 3-2, SUITA, OSAKA 565, JAPAN.
SO ANAL BIOCHEM, (1992) 205 (1), 151-158.
CODEN: ANBCA2. ISSN: 0003-2697.
FS BA; OLD
LA English
AB Previously, a combined use of fast atom bombardment (FAB) **mass spectrometry** and **peptide** N-glycosidase F, an enzyme that **cleaves** the .beta.-aspartylglycosylamine **linkage** of Asn-**linked** carbohydrates, was successfully applied to identification of N-glycosylation sites in a glycoprotein with the known or DNA-derived

sequence (S. A. Carr and G. D. Roberts, 1986, Anal. Biochem. 157, 396-406). Here, we extended the method for easier identification of N-glycosylation sites in a glycoprotein even with unknown sequence. The glycoprotein is digested with peptide-N-glycosidase F in buffer containing 40 at% H2180, to yield a deglycosylated protein whose carbohydrate-linked Asn residues are converted to Asp partly labeled with 180 at their .beta.-carboxyl group during this digestion. The deglycosylated protein is further digested with proteolytic enzymes in an appropriate buffer prepared with normal water, and then peptides are separated on a reversed-phase column by HPLC. Peptides in which carbohydrate-linked Asn has been converted to Asp show a pair of signals ([M + 1]+ and [M + 3]+) in FAB mass spectra due to the partial incorporation of 180 into the .beta.-carboxyl groups of Asp residues, while the other peptides show normal isotopic ion distributions. Thus, both formally N-glycosylated peptides and, using collision-induced dissociation analysis, N-glycosylation sites can be identified. The application of the present method to the determination of N-glycosylation sites in a recombinant glycoprotein, Bacillus licheniformis .alpha.-amylase, is described.

L7 ANSWER 17 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 1991:45286 BIOSIS
DN BA91:23567
TI STRATEGIES FOR DETERMINATION OF DISULFIDE BRIDGES IN PROTEINS USING PLASMA DESORPTION **MASS SPECTROMETRY**.
AU SORENSEN H H; THOMSEN J; BAYNE S; HOJRUP P; ROEPSTORFF P
CS NOVO NORDISK A/S, NIELS STEENSENSVEJ 1, DK-2820 GENTOFTE, DENMARK.
SO BIOMED ENVIRON MASS SPECTROM, (1990) 19 (11), 713-720.
CODEN: BEMSEN. ISSN: 0887-6134.
FS BA; OLD
LA English
AB Disulphide bridges have been assigned in three different proteins by locating possible disulphide-linked peptides in enzymic digests of the proteins based on their molecular weight determined by plasma desorption **mass spectrometry**. Different strategies have been employed including in situ reduction of the nitrocellulose-bound peptides and confirmation of peptide identity by methyl esterification reactions or Edman degradation. The latter was needed for identification of glycosylated disulphide-**linked peptides**. For insulins **cleavage** between cysteine residues in close proximity was not possible; but a combination of molecular mass information, enzymic cleavage with two different enzymes and sequence analysis including identification of di-phenylthiohydantoin-cysteine could ensure an unambiguous assignment of the disulfide bridges.

L7 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1990:3814 CAPLUS
DN 112:3814
TI Evaluation of methods for the analysis of disulfide containing peptides by fast atom bombardment **mass spectrometry**
AU Rodriguez, Henry; Nevins, Byron; Chakel, John
CS Dep. Protein Chem., Genentech Inc., South San Francisco, CA, USA
SO Tech. Protein Chem. (1989), 186-94. Editor(s): Hugli, Tony E. Publisher: Academic, San Diego, Calif.
CODEN: 56QIA7
DT Conference
LA English
AB An evaluation was made of the anal. of disulfide-linked peptides by on-the-probe (OTP) fast-atom-bombardment **mass spectrometry** (FABMS) employing (1) the redn. of cystine to cysteine in an alk. soln. in the presence of a reducing agent such as dithiothreitol, and (2) the oxidn. of cystine to cysteic acid by performic acid. Human growth hormone and several small peptides were utilized in

the evaluation. OTP performic acid oxidn. and OTP redn. proved to be effective and desirable methods for the **cleavage** of disulfide-**linked peptides**. OTP anal. generated higher quality spectra and provided higher sensitivity when compared to the same disulfide cleavage methods performed off-the-probe. However, when OTP redn. was compared with off-the-probe redn., results were similar.

L7 ANSWER 19 OF 19 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 8
AN 1987:6985 BIOSIS
DN BA83:6985
TI CARBOHYDRATE MAPPING BY **MASS SPECTROMETRY** A NOVEL METHOD FOR IDENTIFYING ATTACHMENT SITES OF ASPARAGINE-LINKED SUGARS IN GLYCOPROTEINS.
AU CARR S A; ROBERTS G D
CS DEP. ANALYTICAL, PHYS., AND STRUCTURAL CHEM., SMITHKLINE AND FRENCH LAB., 709 SWEDELAND ROAD, SWEDELAND, PA. 19479.
SO ANAL BIOCHEM, (1986) 157 (2), 396-406.
CODEN: ANBCA2. ISSN: 0003-2697.
FS BA; OLD
LA English
AB A new method is described for locating the specific sites of attachment of Asn-linked carbohydrates in glycoproteins. The molecular weights of peptides released from the glycoprotein with proteases of known specificity are determined by fast atom bombardment **mass spectrometry** and fitted to the known or DNA-derived sequence. Oligosaccharides attached to Asn are released either before or after proteolysis with a glycosidase, usually **peptide**:N-glycosidase F, an enzyme that **cleaves** the .beta.-aspartylglycosylamine **linkage** of all known types of Asn-linked sugars and converts the attachment-site Asn to Asp. New peaks appearing in the mass spectra after treatment with glycosidase correspond to formerly glycosylated sites. Conversely signals which disappear aftger glycosidase treatment correspond to glycopeptides. The difference in mass between these sets of signals define the composition of the carbohydrate at the given site in terms of deoxyhexose, hexose, N-acetylhexosamine, and sialic acid content. The extent of glycosylation at a given site can be estimated from the ratio of the peak heights corresponding to the Asn-vs Asp-containing peptides which differ by 1 Da in mass. This rapid and sensitive (low nmol) technique is illustrated here for ribonuclease B and for tissue plasminogen activator, a multiply glycosylated glycoprotein.

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